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THE RESERVES SITUATION IN THE FEDERAL RESERVE SYSTEM

We are, passing from a debtor to a creditor nation; we have come to hold a disproportionate share of the world's gold; our provincial finance is being transformed into a cosmopolitan finance; banking and financial problems, of huge proportions and in new spheres, are pressing for immediate solution. Luckily the reconstruction of our banking mechanism was well under way when Mars let loose his dogs of war in 1914; we had taken measures to supplant our rigid, restricted, decentralized national bank system with an elastic, freer, centralized federal reserve system. Among the chief elements of strength in a banking system are its reserves and the mechanism by which they are controlled. Size, mobility, and composition are the three factors of strength in bank reserves; they make for safety, elasticity, and accommodation. The federal reserve scheme changed the size, quality, location, and control of our bank reserves; it purposed to make them a more effective defense against panic and a more serviceable agent for accommodation to the business world: the primary reserves were to be rendered so mobile and consolidated and the secondary reserves so convertible that the size of the primary reserves might actually be reduced and yet provide greater safety, elasticity, and accommodation than were realized under our old banking scheme. It will be the aim of this article to present these changes and to note wherein expectations have or have not been fulfilled and how the original plan has been amended.

Reserves against Deposits

Secondary reserves: (1) *of the federal reserve banks.* Since the member banks are stockholders of the federal reserve banks they have the same interest in dividends as do stockholders in an ordinary bank. The Federal Reserve act provides that member banks as stockholders are entitled to receive an annual 6 per cent cumulative dividend on their stock. Up to 1916 the twelve federal reserve banks earned a net half million dollars and during 1916 two

and three quarter millions. The sum of these does not provide the 6 per cent; in fact, the figures for the whole system average about 3 per cent for the two years and 5 per cent for last year, on the yearly average paid-in capital of \$55 millions. By the first of the year all the banks had declared dividends; when declared they are at 6 per cent and postdated to cover accumulated arrears between certain dates. Richmond has hers paid till October, 1916; Atlanta, till June, 1916; Dallas, till April, 1916; but New York, St. Louis, and San Francisco have not yet cleared their 1915 arrears. During 1916 three banks earned more than 6 per cent, eight more than 5 per cent, and ten more than 4 per cent. The system has, therefore, to date, in the light of the money market, been a net burden on the member banks.

Some persons believe this burden will be perennial, some are confident the federal reserve banks will ultimately pay their way. Let them become well established and get their organization expenses amortized; let them become better known and much used by member banks for rediscounting; let them develop their open-market transactions, particularly in acceptances; let them be freed from the handicaps created by war conditions—and it is expected they can earn their 6 per cent dividend and be self-sustaining. They are expensive institutions, but not too expensive for the service they render. It is, of course, wrong in principle to judge the usefulness of the federal reserve banks by their earning capacity. They are dominated by a public interest, not a profit-making interest; the public interest may necessitate that they enter into transactions which will result in little if any profit.

Nevertheless, the fact of these low earnings has had a most telling effect on the attitude of the national and state banks toward the system, and has, together with other matters relating more directly to bank reserves, occasioned the chief movements for changing the system by legislation and board regulation. One of these movements is to reduce or abolish the capitalization of the federal reserve banks. The argument, occasioned as it was by the low earnings of the capital stock, was that the choice of 6 per cent subscriptions was arbitrary and a guess at what the capital requirements would be, and that the mere liability of the banks for the required capital would have been as effective as its payment; that the paid-in capital created a dividend responsibility which forced banking operations and earnings, *i.e.*, forced the reserve banks into competition with the member owners, in open-market

operations; and that the gold reserves paid into the reserve banks would be ample to take care of the rediscounting needs; and, finally, that these subscription requirements discouraged state banks from entering. Efforts to obtain legislative relief from Congress have failed; such relief was opposed by the Federal Reserve Board and by a majority of the Advisory Council. The capitalization serves many useful ends; it provided an initial working capital; it gives the members a decided interest in the reserve bank other than mere depository; it provides resources sufficient to insure stability and continuity for the reserve bank; and it furthers (or, as alleged, necessitates) more extensive open-market operations, which are the instruments by which the board and reserve banks will, it is hoped, master the banking situation.

By open-market operations the federal reserve banks will, when the system is developed, control the money market. It is their means of making the market rate conform to the rediscount rate set by themselves and the board. By becoming an active factor in the market, buying and selling at the established rates, they can make the rediscount rate effective in the market; otherwise, whether it would be effective or not would depend wholly on the extent to which member banks chose to rediscount. By this means the reserve banks will be enabled to maintain a reasonable and stable interest rate.

But this power of control is possible only if the reserve banks have a substantial amount of loan funds at their disposal and if the open-market purchases are commercial papers and if a really broad discount market exists. The recent growth in banker's acceptances both existing in the market and bought by the federal reserve banks indicates that these banks are beginning to assume somewhat the place which the Bank of England fills in the English discount market. The board's policy is to suggest to the federal reserve banks a substantial reduction of their earning assets when money is easy, thus absorbing much of the idle funds on the market; for instance, in order to absorb part of the great gold imports during the latter part of January and early February, purchases of acceptances fell off and United States bonds were sold, raising the reserves \$33 millions; and in anticipation of the declaration of war the earning assets were reduced from \$222 millions at the beginning of the year to \$167 millions at the outbreak of the war. The reserve situation was therefore so exceptionally strong as to stifle all uneasiness. On the other hand, if money

tightens, as it did the first week of last December, besides the increase of rediscounts to \$38 millions on December 7, the earning assets were increased by open-market purchases, thus releasing federal reserve notes and the legal tender funds of the central banks and easing rates. Now if the volume of commercial bills on the open market can be increased to some amount comparable with the volume on the English discount market and the loanable funds of the federal reserve banks can be increased *pari passu*, it will be altogether possible for the federal reserve system to control the international gold flow and defend our financial system in times of peace against wide fluctuations in money market rates and in the wake of the war against too sudden and great efflux of gold.

The advisability of having a paid-in capital stock for the federal reserve banks and of thus creating a dividend responsibility has been shown open to dispute, and, later in this article,¹ it will be shown inadvisable for the federal reserve banks to pay interest on balances carried for member banks according to reserve requirements. To create such an interest obligation would necessitate that the federal reserve bank invest too large a proportion of its assets, including these reserves, in securities which are characterized by their good earning power rather than by safety and convertibility in times of emergency. It is the established custom among European central banks to pay no interest on deposits. Reserve banks must maintain their reserves in gold or in self-liquidating short-term commercial instruments or in securities readily convertible without sacrificing values even in times of panic. Call loans, too, were eliminated by the very theory and purpose of the Federal Reserve act. The range of investments for the reserve banks is thus very limited; practically all their earning assets must be quick assets and act as secondary reserve. Yet under the banking scheme the investment of some funds is necessary to pay running expenses and dividends on capital stock; but the element of liquidity must ever be transcendent in this secondary reserve.

The total earning assets of the twelve reserve banks have averaged for the first four months of 1917 \$202.7 millions, which is 22 per cent of the average total resources. Of these total earning assets an average of 61 per cent has been composed of commercial paper of the highest quality, namely, rediscounts for members and acceptances bought in open market. The municipal warrants and treasury notes, as well as the certificates of indebtedness issued in

¹ See page 519.

anticipation of Liberty Loan subscriptions, also have early maturities, and the bonds held are United States bonds for which the market is generally good. It is therefore apparent that nearly all of the assets of these central banks are carried in legal tender state, or in the most liquid forms of investment known, and as secondary reserves conform to the accepted standard and ideal for central banks.

But the earning power of such investments is low. Calculating the earnings to an annual rate it appears that rediscounts are the most profitable form of investment and municipal warrants second, and the average rate of earnings is about 3 per cent. The government bonds pay but 2 or 3 per cent; the acceptances constitute a large fraction of the investments and the rate of discount on these is very low because they are bought in open market in competition with other banks all of which are suffering from a plethora of gold; and the volume of rediscounts is very small, owing to several reasons but chiefly to the abundance of money everywhere at extremely easy rates.

Secondary reserves: (2) of the member banks. By reason of the wide variety of investments of the member banks and the want of strict standardization in these investments it is quite impossible to determine, considering the system as a whole, the quality and amount of their secondary reserves. A few pertinent matters may, however, be presented. One of these is the relative increases of the various resources. On June 30, 1916, the national and all other banks reporting to the Comptroller owned \$6,057 millions of long-term securities exclusive of their \$760 millions of United States government bonds. From June, 1914, to June, 1916, the aggregate capital and surplus of all the banks increased 5.1 per cent, while their investments in stocks and bonds other than United States bonds increased 27.2 per cent. Compare the figures as given for the March and May calls of 1916 and 1917:

	March 3, 1916	March 5, 1917
U. S. bonds (000,000)	\$753	\$ 714
Other bonds	1,465	1,770 (27.6 per cent) increase
Total resources	13,839	15,979 (15.5 ") "
	May 1, 1916	May 1, 1917
U. S. bonds (000,000)	\$739	\$768
Other bonds	1,526	1,857 (21.7 per cent) increase
Total resources	11,127	13,075 (17.5 ") "

It is seen that for the national banks during the past year the fraction of total resources composed of long-term securities has increased remarkably. The banks are converting a larger per cent of their cash into bonds, commercial banking is yielding to investment banking, the commercial loan fund is drifting to the finance market. War finance is likely to accelerate this drift. But it is a tendency fraught with danger; and the board, the council, and the American Bankers' Association have all issued counsels of moderation in such purchases.² The board believes that "whenever the absorbing power of the investment market shows signs of exhaustion it would be better that the volume of our exports be reduced, or that trade balances in our favor be settled by imports of gold, than that our banks, especially those of moderate size, should unduly extend their investments in foreign securities at a time when business prudence and conservation suggest the necessity of their maintaining themselves in a particularly strong position."³ "Strong position" comes by high liquidity of assets and our repeated experiences with the securities market as a place for instant liquefaction of assets in panic times are warning enough. The cause of this accelerated growth of long-term investments is that deposits have increased faster than loans and bankers have been hard pressed to find openings for their funds in commercial lines.

As yet the liquidity of bank reserves in general has not been greatly increased by bank and trade acceptances; their volume is small and a considerable fraction of them are renewal acceptances.

Primary reserves. The attempt to obviate subscriptions to the

² On June 13, 1917, the Comptroller expressed the opinion that the national banks "could reasonably and conservatively" subscribe on their own account at least 6 per cent of their total resources to the Liberty Loan.

³ One particular instance of the guardianship which the board exercises over the composition of their secondary reserves occurred in November when the board issued through the press a mild and somewhat cryptic statement suggesting caution and moderation in the purchase, by the banks of the federal reserve system, of British Treasury bills, which, "being open for a long period of renewals, lose their character as essentially self-liquidating transactions of short maturity." It was a caution not to accept too freely paper which they will find necessary to extend by successive renewals and eventually convert into a long time investment. In November it was a practical certainty that any such volume of Treasury notes as was proposed to be placed in our banks could not be taken up at their maturity or even after repeated renewals and that the foreign borrowers were assimilating our commercial banking resources and our investment resources.

capital stock of the federal reserve banks was part and parcel of other attempts to escape the redistribution of reserves, as required by the act. The following table gives the reserve requirements under the National Bank act and the Federal Reserve act and amendments, and the allocation of the reserves as between the vaults of the bank itself and those of the reserve banks.

DISTRIBUTION OF RESERVES OF MEMBER BANKS

	Central reserve banks	Reserve city banks	Country banks
(a) Under the National Bank act:			
Total <i>vs.</i> demand deposits .	25 per cent	25 per cent	15 per cent
In its own vaults	all	1/2	6/15
In approved reserve banks (permissive) . . . . .	. . . . .	1/2	9/15
(b) Under Federal Reserve act until amendment Sep- tember 7, 1916:			
Total <i>vs.</i> demand deposits .	18 per cent	15 per cent	12 per cent
Total <i>vs.</i> time deposits . .	5 per cent	5 per cent	5 per cent
In its own vaults	6/18	5/15 (6/15)	4/12 (5/12)
In federal reserve banks .	7/18	6/15 (3/15 + 1/15)	5/12 (2/12 + 1/12)
In either	5/18	4/15 ¹	3/12 ¹
(c) Under amendment of Sep- tember 7, 1916:			
Total <i>vs.</i> demand deposits .	18 per cent	15 per cent	12 per cent
Total <i>vs.</i> time deposits . .	5 per cent	5 per cent	5 per cent
In federal reserve banks .	7/18	6/15	5/12
In either	11/18	9/15	7/12
(d) Under amendment of June 21, 1917:			
Total <i>vs.</i> demand deposits .	13 per cent	10 per cent	7 per cent
Total <i>vs.</i> time deposits . .	3 per cent	3 per cent	3 per cent
In federal reserve banks .	13 per cent	10 per cent	7 per cent

¹ During first three years some may be carried in national banks in reserve cities and central reserve cities.

It will be noted that the federal reserve plan was: (1) to substitute the federal reserve banks for central reserve city and reserve city banks as reserves depositories, which substitution was to be effected by three semi-annual payments; (2) to reduce the reserve requirements against *demand* liabilities and, very much more so, the reserves against *time* deposits, for the first time particularized. The board early became ambitious to concentrate

the gold holdings of the member banks into the federal reserve banks, and Congress following its recommendation, in September, 1916, amended the act of 1914 so as to permit the members to transfer to the federal reserve banks that part of their reserve formerly required to be kept in their own vaults. But the member banks failed to respond to this permission, though solicited earnestly by the federal reserve banks. The board, accordingly, decided to compel the transfer by legislative enactment, secured June 21, 1917, which prescribes only the per cent to be held with the federal reserve bank and lets the member keep what till money it finds expedient. The bills proposed by the board, the council, the House committee, and the Senate committee, though differing slightly in details, agreed in the two ideas of reducing the percentage of reserve and in concentrating the reserves in the federal reserve banks. The new banking system shows, therefore, two very obvious movements—the reduction and the concentration of reserves.

The argument for concentration of reserves is that their efficiency would be increased. The total reserve may remain practically unchanged, but when pooled in twelve banks rather than scattered among 7,500 banks it partakes of the quality of a safety fund or insurance; in the federal reserve vaults it is sure to be liquid and “can be effectively protected when not required and effectively used when needed.”

The effectiveness of the system depends upon universal confidence in its ability to meet any possible situation and such confidence is best inspired by reserves so large as to put away all speculation about it. During the war, big exports have surcharged our financial institutions with a disproportionate part of the world's gold, and many are justly apprehensive lest at the conclusion of the war this will have to be given up in great part. As will appear later in this article in the discussion of federal reserve notes, such demands would bear less heavily upon our credit system if the reserves were surrendered through the federal reserve banks rather than the member banks. The reserves ought therefore to be built up to such size as to meet any possible export demand without shaking the structure and inciting domestic demand. Since the federal reserve banks have supplanted the banks of the New York clearing house as the guardians of our finances, irreparable damage would result to the federal reserve system should it fail to meet the export situation; particularly should the gold reserves of the

federal reserve banks of New York and San Francisco be large, for the drain would be heaviest from these great shipping ports. In the light of the immense imports of gold since the war opened and of the gold produced within our domains, the reserves held in the federal reserve banks make it evident that so far the system has lacked "adequate powers to attract and conserve the gold reserves of the country." The June amendment will improve the situation by forcing a transfer of about \$400 millions from local to central bank vaults.

The member banks have not generally approved the proposal to further concentrate reserves. In part this reluctance is pure sentiment, a hesitancy to part with gold which has gathered the dust of decades in their vaults. But in part this reluctance is upon a reasoned basis. It is argued that the larger the proportion of the member reserves carried with the federal reserve banks the greater is the amount that the reserve banks can use in competing with the member banks in the open-market; and that these concentrated reserves may vanish through re-use by the federal reserve bank, whereas if they are kept in the members' vaults they are intact, cannot be juggled with nor diminished; that if used by the federal reserve bank as the basis of note issue they may inflate the currency two and a half times their amount, or if used to purchase items on the open market they may get back into bank vaults and become the basis of further deposit currency.

In the call of November 17, the Comptroller revised his method of reporting reserves; the items "reserve in vault" and "reserve in federal reserve banks," which had formerly been reported separately, were combined in one item. It was felt that since the adoption of the *ruling* making it optional with members to keep reserves in vault or in federal reserve bank, "these items might properly be consolidated, just as similar figures are combined in English bank statements, and that such consolidation would be a final recognition—that deposits with the federal reserve bank are practically interchangeable (so far as reserve availability is concerned) with cash in vault."

One other and very important amendment was proposed by the board relative to the control and concentration of reserves, viz.:

To meet extraordinary conditions, probably such as threatened financial panics resulting from a declaration of war or the cessation of hostilities in Europe—the Board may upon an affirmative vote of five of its members require member banks to increase the balances which

they must keep on deposit with their Reserve banks; these increased balances can be required, however, for a period of but thirty days. This increase shall at no time be more than one-fifth and at the same rate for all banks of any one district, and the Board is to report to Congress the conditions on which such action is based.

The board argued that this provision would enable it in prolonged periods of extreme ease in money markets to check any tendency toward excessive loans or undue extensions of credit. In considering this proposal it is to be remembered that in cases of emergency the board has, by the terms of the Federal Reserve act, power to suspend for thirty days and to renew such suspension for periods of fifteen days, all reserve requirements of the act. This new proposal is therefore based on the same principle, namely, that banking is better regulated by judgment of a body of experts than by law. The presumption is at all times against statutory regulation of matters of business discretion; it is strengthened just now by the utter impossibility of forecasting what conditions will arise during the present troublous times and of making adequate provision by law for contingencies. And the ill-effects of "letting such matters be controlled by thousands of banks acting each for itself and none with any duty regarding national or international affairs" are too well known. The world's best banking systems are least regulated by law with respect to reserves. Our new system can attain its maximum efficiency only by allowing to the governing board "as broad discretion as prudently can be granted" in using the tools of the system, of which the gold reserves are prime. Power to increase the required reserves would not be as dangerous as the power to lower reserves, which power the board already has.

But this amendment failed of adoption. The House committee by close vote rejected the proposal. The council advised that it would be undesirable and unnecessary to grant such powers to the board; it argued that "the effect would be that member banks would be compelled to increase their non-interest bearing balances with the federal reserve banks, while non-member banks would have the free use of their funds. It would place another stumbling block in the way of State banks joining the system." It would "cause considerable disturbance and apprehension on the part of bankers who had regulated their business according to prescribed standards of reserve, if they suddenly had to curtail their operations on a word" from the board. Many express the opinion that the concentration of power in the hands of this limited body of men has

already approached the bounds of safety and this further grant would introduce unwarranted "officiousness and arbitrary action." The question appears, therefore, to turn upon the principle of government regulation of banking operations, and though the banks acquiesce in the principle to the degree of permitting the board to lower the reserve requirements they are unwilling to allow the board to raise the reserve requirements.

But the main contention of the country banks against the federal reserve system has been the loss of interest on their reserve balance. Provision was made in the Federal Reserve act for the transfer of reserves formerly kept with the reserve city and central reserve city banks to the federal reserve banks. This transfer was provided for by three semi-annual payments. Until November 16, 1917, a decreasing fraction of the reserves might be held in the correspondent banks. By amendment of June 21, 1917, this permission was withdrawn and thereafter all reserves have been carried in their own or the federal reserve banks' vaults.

The evils of our former system of redeposited reserves are too well known to be dwelt upon. It rested upon the theory "that, inasmuch as a balance with another bank was presumably payable on demand, it was equivalent to cash in the vaults of the creditor bank, and should therefore be classified as 'reserves.'" This principle was tenable only so long as these reserves were used merely for providing exchange and the funds were held there in fluid shape. But when the central banks began to compete for these balances and offered interest to attract them, it became necessary to invest these funds, and they developed the call loan for use in the speculative exchanges. This resulted in high values and wild speculation in times of emergency, and in shrinking values and depression in times of tight money; the sacrifice of security values to recover reserve balances wrought bankruptcy and panic and suspension of specie payments.

Mr. Glass, in his report on the Federal Reserve bill, defined its purpose to be "to readjust reserve requirements in such a way as to make them conform to the dictates of scientific banking" with the following "main objects":

1. To abolish entirely the present system of redeposited or pyramided reserves.
2. To establish a moderate required reserve actually to be held in cash in the vaults of the bank.

3. To prescribe a secondary reserve to take the form of a credit with the federal reserve banks.

It has just been shown that this second object has, by amendments, been given up and the real (or whole) reserve of the member banks is to be its credit with the federal reserve bank. This brings out how fundamental is the change now working in the conception of the federal reserve system. It has also been shown how, by the shifts in reserve requirements, counting balances with correspondents as reserves has now become a thing of the past. Both features concentrate a tremendous responsibility upon the federal reserve bank, and the sufficiency and liquidity of its primary and secondary reserves are the palladium of our financial system. The reserves must be kept in gold or in the forms of securities which have the very highest degree of convertibility. Call loans with securities as collateral have proven disastrous. The federal reserve bank must seek investments from the point of view of convertibility and safety and not be forced to care much about their earnings capacity. The success of the whole system therefore depends on their freedom from obligation to pay interest on reserve balances. In the Federal Reserve act there is no express provision prohibiting the federal reserve banks from paying interest on balances, but the evident intent of the act and the necessities of its successful operation require such prohibition in practice.

But this loss of interest has been a serious irritant against the federal reserve system. It has provoked movements for the reduction of reserves, for the permission to continue to count balances with correspondents as reserves, and for relief from the final payment of reserves to the federal reserve banks. The banks get large, if not ample, compensation for this loss of interest by way of increased loaning power on the basis of the reduced reserves required, but, since this gain is less easily allocated and since banks have found it difficult recently to increase their loans as fast as their deposits and take advantage of the lower reserves, they feel the loss of interest.

This reserves question is inextricably interrelated with the new "par collections" system. It is impossible in the compass of this article to give the history of this very important part of our new banking plan or an adequate exposition of the mechanism and its operation. Carrying out a permission granted by the Federal Reserve act, the board, after experimenting unsatisfactorily with

a "voluntary reciprocal" collection's scheme, set up a universal mandatory par collections plan July 15, 1916.⁴

This requires each federal reserve bank to receive for collection and credit at par from its member banks checks and drafts drawn upon all members of the federal reserve system; and, also, on all non-members when such checks and drafts can be collected by the federal reserve banks, through members or otherwise, at par. Lists of such non-members whose items can be collected at par are published. Immediate credit entry upon receipt subject to final payment is given for all such items upon the books of the federal reserve bank at full face value, but the proceeds are not counted as reserve nor become available to meet checks drawn until actually collected. Checks received by a federal reserve bank on its member banks are forwarded direct to such member banks, and are not charged to their accounts until advice of payment has been received or until sufficient time has elapsed within which to receive advice of payment. In order to enable member banks to know how soon checks sent in for collection will be available either as reserves or for payment of checks drawn against them, time schedules giving the minimum time for collection are furnished by each federal reserve bank to its members. Where a member bank does not have sufficient volume of items to offset at the federal reserve bank items sent to such member by the federal reserve bank, such member may ship lawful money or federal reserve notes in payment, at the expense of the federal reserve bank. And the board has fixed a penalty to be imposed upon member banks for encroaching upon their reserves. The cost of clearing and collecting checks and drafts is assessed by the federal reserve bank against the bank depositing such items with it. This cost is known as a "service charge," and is so much per item.

Attention is called to the point as to wherein the plan is compulsory and wherein it is not. The member banks must comply with the statutory requirements about reserves; they are required to pay without deduction checks drawn upon themselves and presented for payment over their counter or by mail from the federal reserve bank and must settle with the federal reserve bank either by acceptable checks upon other banks or by the remittance of lawful money or federal reserve notes at the expense of the

⁴By the Hardwick amendment June 21, 1917, "par collections" becomes somewhat a misnomer, since members are now permitted to charge up to 1/10 per cent for exchange under certain conditions.

federal reserve bank. It is not compelled to give up its former correspondents and may continue to send its checks to them for collection rather than to the federal reserve bank and it will for a time at least continue to receive from its old correspondents checks against itself for similar purpose. It may carry balances with such correspondents as before and receive interest on such balances. But such balances have not, since the amendment of June 21, 1917, been counted as reserves. And the member banks will not have funds sufficient to carry (1) their reserve requirements with their federal reserve bank and a surplus fund also with this bank to cover the exchange balances and insure themselves against penalties for cutting into their reserves, and (2) balances with their correspondents sufficient to warrant the correspondent to perform the wonted services and pay the usual 2 per cent interest. If the member bank continues to carry the former size balances with its correspondents it must ask and is justly entitled to a higher interest rate than 2 per cent, or some additional services, since the former collection services are for the most part no longer performed by the correspondents. The alternative is to seek liquid investments themselves for their surplus funds, or to carry them locally. That these alternatives are being used appears, among other indications, (1) from the accelerated growth of long-term investments by the member banks and (2) from the relative decline of reserves held by central reserve and reserve city banks and from the relative increase in the reserves held by the country banks.⁵

Among the amendments proposed by the board last January and enacted June 21 was one to permit non-member state banks and trust companies, even though too small to be eligible to membership in the federal reserve system, to avail themselves of the clearing and collection facilities of the system, provided they cover at par checks on themselves sent for collection by the federal reserve banks, and provided also that they keep a compensating balance with the federal reserve bank of their district in an

⁵ According to the Comptroller the reserves were as follows (per cent):

	Nov. 15, 1915	Nov. 17, 1916	March 5, 1917	May 1, 1917
In central reserve city banks	24.66	20.50	21.31	20.47
In reserve city banks . . .	27.89	24.88	24.48	22.84
In country banks	24.96	27.62	24.36	27.29

amount to be determined under rules prescribed by the board and sufficient to offset items in transit held for their account. Such holdings are to be solely for the purpose of exchange and collections. In proportion as a clearing and collection plan becomes so comprehensive as to provide for all checks does it become effective and useful; the par list has been steadily increasing both by voluntary action of the banks and by pressure from the federal reserve banks; as soon as the plan becomes universal so as to include all state as well as the national banks, and all forms of collection items, the necessity for maintaining accounts with correspondents for collection purposes, in addition to those with the federal reserve banks, will cease.

The second way in which "par collections" affect the reserves situation is that it reduces the "float." The old collections system was that a country bank when it dispatched a check by mail to its reserve city correspondent for collection received in most cases immediate credit. Commonly the checks were not sent by the correspondent directly to the drawee banks, some other route, often very roundabout, being selected to avoid collection charges. Hence, though the checks were not collected for days or weeks, the remitting bank received credit at once and this credit constituted a part of the reserve which it was required to keep either in its own vaults or those of its reserve city correspondents. The total sum of such checks in the mails at any one time varied between \$300 and \$500 millions. This was known as the "float."

This custom of considering both cash and uncollected checks, indiscriminately, as bank reserves was dangerous, misleading, unscientific; and to remedy it has been a most difficult task, since it affected most intimately the daily practices of every bank in the country. It really constituted a continuous impairment of reserves and a continuous overdraft on its account. It would have been positively foolish for the federal reserve banks to carry the burden of this "float." The 27,000 banks which have been carrying it have combined resources of about \$27 billions; whereas the aggregate resources of the twelve federal reserve banks are about half a billion.⁶ The float was substantially equal to their resources; that is, "their reserves would be constantly afloat in the mails instead of in their vaults and their value as reserve agents completely nullified."

In the adoption of the mandatory system in July, 1916, immed-

⁶ Comptroller's report, 1916.

iate credit was given up and deferred credit substituted; now tentative credit only is given by federal reserve banks to their respective members, but the proceeds are not available for use either as reserves or otherwise until the funds are actually collected. Immediate credit is given only on checks against banks in the federal reserve city; checks on other federal reserve banks and on members of other federal reserve banks are credited only after one, two, four, and eight days, depending on the zones determined by average time it takes mail to reach the drawee bank. The checks are routed directly now, and this also cuts down the float. This abrogation of the practice of counting items in transit as reserve changes radically the quality of the reserves and thereby substantially increases them, *i.e.*, by the size of the reduction in the "float."⁷

Reserves against Notes

Under the federal reserve system there are three forms of notes issued. The old national bank notes are continued in circulation with the same securities and redemption fund as before 1914. The federal reserve banks are permitted, or under certain conditions compelled, to purchase a limited amount of the United States bonds securing the national bank notes and to substitute for these notes their own "federal reserve bank notes," as they are called. The total issue of these up to December 31, 1916, was \$12 millions; \$6 millions are now held by the federal reserve bank of Kansas City,⁸ and \$2 millions by the federal reserve bank of Dallas. The remaining \$4 millions are in circulation or in the Treasury of the United States, but these banks have extinguished their liability on these \$4 millions by the deposit of lawful money. So there is no addition to the circulation of the country through the issue of federal reserve bank notes.

The third form is the federal reserve note. This was introduced into our banking system to provide an elastic note issue, an issue which would increase and decrease with the local seasonal demands

⁷ Statement of the statistics of the primary reserves held by the state, national, and federal reserve banks is omitted from this paper. The reader is referred to the press reports of the Comptroller after each call or his more extended subsequent reports and to the weekly or monthly summaries in the financial sections of our dailies or financial journals. The limits of space for this article prevent a statement and discussion of the migration of reserves and the volume of surplus reserves and their location.

⁸ Some few of these notes were issued in June, 1917, by this bank, apparently in connection with the flotation of the Liberty Loan.

for money. Elasticity was to be gotten by basing the issue and security of these notes upon commercial paper. Paper meeting strict definition and discounted by a member bank could be rediscounted with the federal reserve bank, the member bank receiving federal reserve notes. The federal reserve bank, in turn, procured these from the Federal Reserve Board, by pledging these rediscounts as collateral with the federal reserve agent, and by providing in its own vaults a gold reserve of 35 per cent and a gold redemption fund of 5 per cent with the United States Treasury.

The Federal reserve agent cannot issue these notes to the Federal reserve bank except in response to the presentation of rediscounted bills as collateral. But the notes once in the hands of the bank can be issued to its members as proceeds of a rediscount of paper, or in exchange for gold, or gold certificates, or it may issue them to any person, corporation, bank or concern that has gold, coin or certificates, and wishes to exchange for federal reserve notes.

In this way the volume of notes would expand in proportion to business needs and when the commercial paper matured it would be taken up by the presentation notes or gold, thus reducing the volume of currency when business needs fell off.

But this process of issue and of the redemption of the paper has resulted in a most peculiar situation. The paper has been redeemed in part by the deposit of federal reserve notes and the trustee holding the collateral has been correspondingly cancelled. But a much bigger portion of the paper has been redeemed by deposit of gold coin and certificates, and the federal reserve notes have stayed out in circulation; meanwhile the agent's liability has continued and a large fund of gold has accumulated in his hands. By the weekly statement, of June 15, 1917, for instance, there were issued to the federal reserve banks \$528 millions of these notes, of which \$491 millions were in circulation; against these \$528 millions the federal reserve agent held as collateral only \$69 millions of rediscounted commercial paper and for the rest gold coin and certificates.

Several features of this situation are noteworthy. (1) The volume of federal reserve notes is relatively large and constant:⁹ the notes stay out in circulation when issued; the volume of the notes *per se* does not expand and contract in conformity with business needs but the aggregate volume of currency does. (2)

⁹ Below is given the volume of federal reserve notes issued to the federal reserve banks by the federal reserve agent as reported weekly the forepart of

The federal reserve notes are tending to supplant the gold certificates as common circulating medium; the gold certificates are drifting into the hands of the federal reserve agents and federal reserve notes circulate in their stead. Also, since the federal reserve notes cannot by law be used as reserves in the member banks (but gold certificates may), the gold certificates are also drifting into the reserves of the member and federal reserve banks, and their place in the currency is filled by federal reserve notes; on the other hand, since federal reserve notes may be used in state bank reserves, the state banks may be giving up gold certificates and substituting federal reserve notes. (3) The gold cover of these notes is very high, ranging as high as 90 per cent.¹⁰

This impounding of gold in the hands of the federal reserve agents has occasioned both approval and criticism. The process has resulted in a slight increase of the currency, *e.g.*, \$69 millions on June 15. On the other hand, it has extracted from circulation \$460 millions of gold which might have entered into bank reserves and become the basis of deposit expansion; but since the federal reserve notes are legal reserve in the banks and trust companies of some states and since they have to some extent, despite the laws, found their way into the reserves of national banks, they may fill about equally the place of the \$460 millions of gold as a basis of credit. Impounding of gold has not reduced the lending power of

1917; there is also given the volume of commercial paper held by him against these; the rest is covered by gold and gold certificates on hand and by his credit balance in gold redemption fund held with the Treasury and by his balance with the Federal Reserve Board:

		(Millions)	(Millions)			(Millions)	(Millions)
January	5 . . .	\$300.5	\$18.9	April	5 . . .	\$400.7	\$22.3
"	12 . . .	300.3	18.9	"	13 . . .	431.	20.9
"	18-9 . .	293.4	18.9	"	20 . . .	440.	22.0
"	26 . . .	291.6	18.3	"	27 . . .	446.	23.6
February	2 . . .	290.6	16.5	May	4 . . .	458.8	25.8
"	9 . . .	308.3	19.6	"	11 . . .	470.4	32.1
"	16 . . .	321.5	24.1	"	18 . . .	478.9	30.6
"	23 . . .	331.5	25.3	"	25 . . .	488.1	31.5
March	2 . . .	343.	26.3				
"	9 . . .	355.	26.8				
"	16 . . .	363.	24.7				
"	23 . . .	372.	22.7				
"	30 . . .	382.	21.9				

¹⁰ That is, the federal reserve notes are practically the same as gold certificates, and the net addition to the circulating media of the country is simply that small fraction represented by the commercial paper collateral; as shown, this was \$69 millions on June 15, 1917.

the federal reserve banks; this power is held in reserve and under emergency rediscounting is resorted to freely.¹¹

But the common defense of this accumulation of gold with the federal reserve agent is that when, following the war, the belligerents pull back from the United States their due share of the gold now piling up in our country, the holders of these federal reserve notes can withdraw from the federal reserve agents vast sums of gold without disturbing the credit structure, whereas, if it were in the reserves of local banks, the credit of these banks would have to be reduced many times the amount withdrawn. The force of this argument rests upon the assumption that federal reserve notes do not enter bank reserves, which assumption has been qualified above.

The National City Bank of New York has led a campaign of publicity seeking to persuade the money and credit world that it is desirable to have the federal reserve banks issue federal reserve notes directly for gold and to have the gold accumulate in the hands of the banks rather than of the federal reserve agents. It has been shown that, by a roundabout process of issue, the federal reserve notes come to be practically issued for gold and are like gold certificates. The gold, however, is in the hands of the agents rather than the banks and it cannot become the basis of issue of more notes than 100 per cent of its value; on the other hand, if it were in the hands of the banks, since they need only keep a 40 per cent gold reserve, this gold might become the reserve for two and one half times its value; this additional currency-issuing power, it is argued, would be most desirable in case of emergency and in case Europe drew back some of our gold hoards after the war. The federal reserve banks could give up vast sums of gold and, by rediscounts, fill the cavity by federal reserve notes using the residue of gold as a basis of issue. In other words, our ability to give up gold without precipitating a crisis would be materially increased if the gold of the United States could be concentrated in these central banks and the direct issue of federal reserve notes for gold would be an easy and effective way of bringing it about. At present the immense imports of gold flow either to the federal Treasury in exchange for gold certificates or to the member and state

¹¹ Actual instances of relief in such emergencies, though of minor size, are the tight money market in the first week of December, 1916, the series of bank failures in Seattle the first week of February, and the adjustments occasioned by the Liberty Loan subscriptions the second week of June, 1917.

bank vaults. That which goes to the Treasury is as ineffectively used as is that which goes to the federal reserve agent and for the same reason. That which goes to the banks' vaults becomes the basis of a credit structure which would topple if the gold were withdrawn. Hence it is best that the gold be concentrated in the federal reserve banks.

If federal reserve notes were issued by the federal reserve banks directly for gold, holders of gold instead of carrying it to the Treasury and getting gold certificates for it, would take it to the federal reserve banks and get federal reserve notes; and if the federal reserve notes were made legal for use as reserve money, it is likely that the member and state banks would deposit their gold with the federal reserve banks, and carry federal reserve notes as their reserve. This proposition goes further and would abolish the issue of gold certificates by the Treasury, leaving the whole field to the federal reserve banks and the federal reserve notes. The big central banks of Europe issue notes for gold directly; in fact, this is the sole function of the Issue Department of the Bank of England; and the strength of the note of the Bank of England is this gold cover.

This proposal has been a part of the general campaign to concentrate the gold of the country in the federal reserve banks. It would strengthen the potential lending and note-issue power of these central banks in case of need. The campaign for direct issue of notes for gold terminated successfully in the amendment of June 21, 1917. They may be now issued for gold or gold certificates. The gold and gold certificates held as collateral by the federal reserve agents for notes issued are now counted as part of the reserve which the federal reserve bank is required to maintain against its notes in actual circulation. *All* outstanding federal reserve notes are now shown as a liability of the federal reserve banks. There is the further provision that gold deposited with the Treasurer of the United States for the redemption of federal reserve notes is to be considered as if collateral security on deposit with the federal reserve agent.

In January the proposal to issue notes directly for gold was rejected by practically unanimous vote by the House committee, but Congress yielded in June under pressure of war contingencies. The opposition fought it on the ground that it was unnecessary; that, since it was bound up with the proposal to make federal reserve notes legal reserve for member banks, it was a form of pyra-

mided credit and fraught with danger of inflation; and that it was contrary to the principle of the federal reserve system which contemplated that every note issued was to be issued on the basis of a rediscounted commercial paper and was to be born with a business transaction and to cease with it, whereas the present proposal was to issue them as gold certificates and permanent currency. The first objection may be ignored; the second does not apply to the amendment as enacted nor is it consistent with acquiescence in accepting credit with the federal reserve bank as the only reserve of member banks; and the third objection ignores the real fact of issue of federal reserve notes for gold by a roundabout process.

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THE FALL RIVER SLIDING SCALE EXPERIMENT OF 1905-1910

In the cotton textile mills of Fall River, Massachusetts, between 1905 and 1910 an experiment was made in the determination of rates of wages by the method of the sliding scale agreement. From the standpoints both of the employers and of the employees immediately concerned this experiment constituted an attempt to secure a *modus vivendi* which would prove mutually beneficial and satisfactory. It is possible to view the subject of this experiment, then, as one that may throw some light upon the problems of collective bargaining in this particular industry, by the study of which employers and employees may be advised with reference to situations that may arise in the future.

But the broad, theoretical question is this: Were the Fall River sliding scale agreements of 1905 and 1907 fundamentally sound in principle? Their mere abandonment does not afford an answer. For soundness and unsoundness of theoretical foundations are often intricately confused with efficiency and inefficiency of administration. With the personal problems of administration connected with these particular sliding scale agreements we have no concern at this time. Attention is here centered upon matters of fundamental principle, with the assumption that the personal factors involved were of such a quality as to afford no justification for any attempt to place upon them the responsibility for disappointing results.

In attempting to reply to this question this paper will (1) present briefly the facts of importance to the understanding of the industrial situation in the Fall River cotton mills; (2) narrate without attempt at critical analysis the history of the sliding scale experiment, including in this part of the treatment, of course, the necessary descriptions and explanations of the agreements themselves; and (3) present an analysis of the experiment with a view to ascertaining its merits and defects.

The Industrial Situation in Fall River

The city of Fall River, with its population of approximately 120,000 and its cotton mills numbering about fifty, has the distinction of being the city first in importance in the cotton textile industry of the United States. Its 75,000 looms and 3,000,000 spindles, with the machines used in the subsidiary processes, require the services of approximately 30,000 employees. These em-

ployees, like the textile employees throughout New England, are for the most part foreign born or of foreign extraction. In Fall River the English and Irish groups have exerted a greater influence than in most of the New England cotton manufacturing centers; a fact which has doubtless been partially responsible for the superiority of the Fall River operatives over other groups in matters of organization for purposes of collective bargaining.¹

In general, the operatives of the different racial groups distribute themselves throughout the several departments of the mills in such a way that the heavier, coarser, and less skilled tasks fall to the groups of more recent admission to the country. Among these last-mentioned workers labor organization on the craft basis is developed very slightly, if at all. These workers, for the most part engaged in the less standardized, subsidiary or minor processes, lack strength of organization and depend quite largely for leadership in collective bargaining in matters involving wages upon the local organizations of mule spinners, weavers, slasher tenders, carders, and loom fixers. From time to time general textile organizations such as the United Textile Workers of America (organized in 1901) and more recently the National Amalgamation of Textile Operatives (organized in January, 1916) have exerted some influence with and in behalf of the local organizations of the Fall River operatives. But, at least for the period of the sliding scale experiment, the Fall River Textile Council, composed of representatives of the five major craft unions above named, served as the bargaining agency of the workers.

On the side of the employers the mechanism for collective bargaining has consisted, for a considerable number of years, of an organization now styled the Cotton Manufacturers' Association,² in the membership of which are included nearly all of the cotton mills of the city. The Fall River Iron Works, a corporation running about 12,000 looms and 485,000 spindles, is the one mill

¹ New Bedford, the chief city in the fine goods manufacture, is a possible exception to this statement.

² This association was formed on April 19, 1873, as the Manufacturers' Board of Trade. The name was changed to its present form on October 27, 1890. Collective bargaining was first participated in on January 30, 1875, when the association dealt with a committee of weavers. The present Textile Council is first mentioned in the association's records on February 20, 1899, which may be considered to be the date of the termination of collective bargaining with the operatives simply as members of particular crafts.

of considerable importance which has persistently declined to deal indirectly with its own employees in matters concerning wages. Occasionally this mill has made changes in wages which have influenced the wage policy of the Cotton Manufacturers' Association. But the important fact is that throughout the mills of Fall River there was, even before the formal sliding scale agreements were made, substantial uniformity of wage policy and of changes of rates of wages.

In view of the extent to which the principle of the division of labor is applied in the manufacture of cotton yarn and cloth it is important for the purposes of this study that there has been substantial uniformity of changes of rates of wages as between the different departments of the mills.³ That this has been the case is the testimony of leaders of the Fall River craft unions, given in conversation or in correspondence with the writer. It is also the opinion of a Fall River manufacturer, Mr. J. T. Lincoln, expressed in an article on the sliding scale experiment written before the agreement was abandoned.⁴

Not only have changes in rates of wages been substantially uniform throughout the mill departments, but the weaving rate on a standard grade of print cloth has been the basis of discussion and of wage calculation in all general wage disputes. This statement applies both to the period of the sliding scale experiment and to the periods before and after.

With this brief explanation of the industrial situation in the Fall River cotton mills let us pass to the narration of the events of the sliding scale period.

The History of the Sliding Scale Experiment

On July 14, 1904, after a period in which conditions in the industry had been unsatisfactory both to the employers and to the employees, during which period unemployment had been ab-

³ An exception to this statement is the case in 1894 when, on the occasion of a general strike, only the mule spinners were successful. These received a wage advance of 5 per cent, while the rest of the operatives resumed work at the rates previously in force.

⁴ J. T. Lincoln, "The Sliding Scale of Wages in the Cotton Industry," *Quarterly Journal of Economics*, vol. XXIII, pp. 450-469. The quotation is from page 461. This article is chiefly narrative, and little attention is devoted to criticism. Where the writer of the present article has thought it necessary, for the sake of completeness, to repeat facts given by Mr. Lincoln, this repetition has been abbreviated, even at the risk of seeming to present an unbalanced treatment.

normally large and wages in the Fall River mills had been reduced about 10 per cent (in November, 1903), it was announced in the mills represented in the Cotton Manufacturers' Association that on July 25 there would be a further reduction of $12\frac{1}{2}$ per cent. As a result there occurred what is known in the industry as the "great strike of 1904." For nearly six months the Fall River cotton industry was at a standstill. Finally work was resumed on January 18, 1905, on the basis of an agreement "that Governor Douglas should investigate the matter of margins between the cost of cotton to the mill owners and the selling price of cloth, and submit his conclusions as to an average margin, upon which the manufacturers should pay a dividend of 5 per cent on wages earned from January 18 to April 1."⁵

On May 17, Governor Douglas reported that a margin of 74.38 cents was necessary to justify a wage "dividend" of 5 per cent. The margin on January 18 had been 67.80 cents, and had steadily grown smaller. The reduction of the weaving rate to 17.32 cents per cut was therefore accepted by the operatives, with the understanding that with the improvement of trade the mills would move wages up toward the level at which they had stood before the reduction of November, 1903.

On October 17, 1905, the Manufacturers' Association made to the operatives in the mills included in the organization a proposition as follows.⁶ Beginning October 23 wages should be increased about 5 per cent. In addition a sliding scale agreement should be made, according to which, whenever the employers' margin of profit (to be figured as the difference between the price of raw cotton and that of regular print cloth) should exceed 75 cents, there should be a wage dividend or premium of 1 per cent for each cent the margin stood above 75 cents up to a margin of 85 cents; and that for each cent the margin should exceed 85 cents up to a maximum of 95 cents there should be an additional wage premium of $\frac{1}{2}$ of 1 per cent. Calculations of margins and of wages should be made at the end of four-week periods, and the wage premiums should be given to employees of at least two weeks' standing.

⁵ *Commercial and Financial Chronicle*, Sept. 9, 1905, p. 808. See also *Textile World Record*, vol. XXIX, p. 593, and Massachusetts Board of Conciliation and Arbitration, *Annual Report*, January, 1906, pp. 20-22. The last-mentioned source gives Governor Douglas' full report. For an explanation of the method of calculating the margin of profit see note 9 of this article.

⁶ *Chronicle*, Oct. 21, 1905, p. 1268.

Immediately following this proposal of the Manufacturers' Association, the Fall River Iron Works announced an advance of about 14 per cent on the rates of wages prevailing before January 23, 1905.⁷ Dissatisfaction among the employees of the other mills caused by this move gave rise to some talk of a strike to secure similar concessions from the Manufacturers' Association.⁸ This, however, was soon quieted, the Textile Council coming to an agreement with the employers on October 25.

The arrangements then made embraced the same scale of graduated rates suggested in the employers' proposal of October 17, except that 72.5 cents rather than 75 cents was agreed upon as the base margin for a wage of 18 cents per cut for weaving regular print cloth. The base rate of 18 cents was to be the minimum rate. The proposed maximum margin of 95 cents beyond which the wage rate should not slide was excluded from the agreement. And in place of calculations of average margins and wages at intervals of four weeks, provision was made for weekly changes of rates. In the calculation of the margin, two grades of cloth (28-inch and 38½-inch 64 by 64 prints) were to be considered. It was tacitly agreed that the sliding scale should be given a fair trial for one year.⁹ The following schedule of hypothetical margins and weaving rates under this agreement of October, 1905, may help the reader to visualize the plan of wage determination and to make comparisons with later schedules:

Margins (Cents)	Weaving Rates (Cents)	Margins (Cents)	Weaving Rates (Cents)
115.....	22.95	85.....	20.25
110.....	22.50	80.....	19.35
105.....	22.05	75.....	18.45
95.....	21.15	72.5.....	18.00

This first formal sliding scale experiment was of short duration. For this there were two chief reasons. First, under this agreement, the average weaving rate in force was only 18.61 cents

⁷ *Chronicle*, Oct. 21, 1905, pp. 1268, 1269.

⁸ *Ibid.*, Oct. 28, 1905, p. 1329.

⁹ Some sources for the terms of this agreement are: *Chronicle*, Nov. 4, 1905, p. 1385; Lincoln, *loc. cit.*, p. 456; Massachusetts Labor Bulletin, No. 38, p. 342, No. 41, pp. 192-196; *Textile World Record*, vol. XXX, pp. 361-363.

The "margin of profit" which was involved in the sliding scale agreements of 1905-1906 and 1907-1910 and which was considered by Governor Douglas in the arbitration of the dispute of 1904-1905 was a margin of profit per unit of product—the differential between the cost of a certain amount of raw cotton and the price of the cotton cloth into which the raw material was con-

per cent of regular print cloth; which constituted an average "wage premium" of only 3.38 per cent, or only about one half of the desired restoration of wages to the level prevailing between November, 1903, and July, 1904. Second, the rates of wages paid fluctuated so violently from week to week (see Table 1) that the operatives became much dissatisfied and were led to question the validity of the theoretical foundation of the experiment.¹⁰

Dissatisfaction caused by these conditions was intensified when, in May, 1906, voluntary wage advances of 10 per cent were made by certain corporations in Massachusetts and Connecticut engaged in the manufacture of fine goods.¹¹ Although the employers in Fall River were insistent that "increases in fine goods mills, where margins of profit were large, should have no bearing on the general situation in Fall River,"¹² the Textile Council, voicing the feeling of the operatives with regard to the sliding scale, strongly urged the abandonment of the experiment and the restoration of the rates of wages prevailing before July, 1904. This request was made on June 8. On the sixteenth of the same month the Manufacturers' Association made a counter proposal, offering to guarantee a wage premium (on the basis of the sliding scale) of 5 per cent from June 12 to October 1 "with a further guarantee that if the margin in any one week exceeded this 5 per cent in-

verted. The exact method of computation of the margin under both agreements may be reduced to the following rules.

Multiply the price of middling upland cotton by 8 (to get the price of 8 pounds); multiply the selling price per yard of 28-inch print cloth by 45 (the number of yards in a cut); multiply the selling price per yard of 38½-inch print cloth by 33.11 (the number of yards in a cut); add these last two products; divide by 2; deduct the price of the 8 pounds of middling cotton.

For example, using the data for 1881 (see Table 3):

	<i>Cents</i>
45 yards 28" 64x64 print cloth @ 3.95c =	177.75
33.11 yards 38½" 64x64 print cloth @ 7c =	231.77
Sum =	409.52
Divided by 2 =	204.76
8 pounds middling upland cotton @ 12.03c =	96.24
Margin of profit =	108.52

It is to be noted that Governor Douglas considered only the 28-inch prints in making his computations.

¹⁰ For an elaboration of this point see Lincoln, pp. 456-459.

¹¹ *Chronicle*, June 23, 1906, pp. 1405, 1406.

¹² *Ibid.*, Sept. 8, 1906, p. 531.

TABLE 1.—ACTUAL MARGINS AND RATES UNDER AGREEMENT OF OCTOBER, 1905.¹

Week ended	Margins	Wage premiums	Weaving rates	Week ended	Margins	Wage premiums	Weaving rates
1905	(Cents)	(Per cent)	(Cents)	1906	(Cents)	(Per cent)	(Cents)
Oct. 27	77.00	5	18.90	Mar. 3	82.85	10	19.80
Nov. 3	75.70	3	18.54	10	80.19	8	19.44
10	71.40	0	18.00	17	81.27	9	19.62
17	74.00	2	18.36	24	77.82	5	18.90
24	73.50	1	18.18	31	75.42	3	18.54
Dec. 1	75.20	3	18.54	Apr. 7	76.15	4	18.72
8	72.40	0	18.00	14	75.02	3	18.54
15	75.02	3	18.54	21	74.82	2	18.36
22	73.76	1	18.18	28	75.55	3	18.54
29	75.37	3	18.54	May 5	72.85	0	18.00
1906				12	71.40	0	18.00
Jan. 5	76.41	4	18.72	19	70.68	0	18.00
12	78.09	6	19.08	26	71.14	0	18.00
19	75.23	3	18.54	June 2	73.28	0	18.00
26	75.56	3	18.54	9	75.56	2	18.36
Feb. 2	79.49	7	19.26	16	76.67	2	18.36
9	81.16	9	19.62	23	71.17	0	18.00
16	81.45	9	19.62	30	71.16	0	18.00
23	82.75	10	19.80				

¹ This table is constructed on the basis of the table presented by Mr. Lincoln on page 457 of his article. Computations for June, 1906, have been added; also actual weaving rates for the entire period.

crease they would pay the additional amount."¹³ When this plan was rejected the manufacturers yielded, promising to restore the rates desired (*i. e.*, rates based on a weaving rate of 19.80 cents), at the same time protesting that the margin of profit warranted no such advance, and claiming that the advance was made only in the interest of the general welfare of the city.¹⁴ The new schedule became effective July 2, 1906.

The weaving rate of 19.80 cents per cut thus established remained in force only a few months. A widening margin of profit and a demand for cotton goods so large that, in view of a reported scarcity of labor, it could not be satisfied,¹⁵ soon led to renewed

¹³ *Chronicle*, June 23, 1906, p. 1406.

¹⁴ *Ibid.*, June 23, 1906, p. 1448. Following the action of the Manufacturers' Association, the Fall River Iron Works increased the wages of its operatives 10 per cent, "giving them that advantage over the help in other mills of the city" (*Chronicle*, Sept. 8, 1906, p. 531).

¹⁵ *Ibid.*, Jan. 5, 1907, p. 60. Mr. Lincoln in his article (p. 459) says that the prosperity of the industry at this time was "greater than ever before known."

demands for wage advances. This time the request was for a restoration of the rates prevailing before the reduction of 1903. After some parleying, a counter proposal by the employers of a compromise at 5 per cent increase (with the promise of 5 per cent more in February, 1907, if conditions should be favorable),¹⁶ and a threat of strike on the part of the employees, the manufacturers yielded, and a rate of 21.78 cents was announced to take effect November 26. The margin at this time was about 95 cents.¹⁷ And it was a part of the settlement then made that the wage determined upon should be effective for six months, at the end of which period there should be a readjustment with reference to the then existing margin.¹⁸

Accordingly, near the end of April, 1907, discussion of the wage problem was again opened. The margin of profit was found to have widened quite substantially, and the advantages which might have accrued to the operatives had they not insisted upon abandonment of the sliding scale appeared very great. The demand of the operatives was for a 10 per cent advance. This the employers were disposed to refuse, but finally the advance was granted with a sliding scale agreement attached.

In brief, the provisions of this agreement were as follows. Eighteen cents per cut was established as the minimum weaving rate for 28-inch prints at a base margin of 72.5 cents. At a margin of 75 cents the weaving rate should be 18.68 cents, and above the margin of 75 cents rates were graded in accord with the margin changes indicated in the following tabulation until a maximum margin of 115 cents was reached at which the maximum weaving rate should be 23.96 cents. The scale of progression was slightly steeper than that provided in the agreement of 1905.

Margins (Cents)	Weaving Rates (Cents)	Margins (Cents)	Weaving Rates (Cents)
115.....	23.96	85.....	20.69
110.....	23.42	80.....	19.66
105.....	22.87	75.....	18.68
95.....	21.78	72.5.....	18.00

Second, the agreement provided that rates of wages should change only once in six months, calculations being made on the

¹⁶ *Chronicle*, Nov. 24, 1906, p. 1302.

¹⁷ *Ibid.*, May 11, 1907, p. 1129.

¹⁸ *Ibid.*, Sept. 7, 1907, p. 564.

last Monday of May and November of each year, the rate to be effective in each six-month period being determined by the average margin of the preceding six months. And, quoting from section 2 of the agreement, "there shall be no change in prices on either the ascending or descending scale unless the margin has reached a point indicated in the . . . schedule."

The new agreement went into force with a weaving rate of 23.96 cents, the highest rate allowed under the terms of the bargain, and also the highest rate which had ever been paid in the Fall River mills. But the extremely high margins of 1907 were of short duration; and 1908, 1909, and 1910 witnessed successive downward movements. Not only was this true, but, in 1907, difficulties in the financial world found their way into the cotton industry, with the result that curtailment of production was considered and well under way before the end of the year.¹⁹ Corporations supposed to be filling large orders were unable to secure ready money for use in purchasing materials and in meeting payroll demands, as jobbers were embarrassed by very high interest rates in making payments on deliveries of goods.²⁰ Through the spring of 1908 curtailment in the form of a short working week was still general.²¹ At points throughout New England other than Fall River reductions in wages were the order of the day. But at Fall River the sliding scale agreement for a time saved the operatives from this form of hardship. When, near the end of May, calculations of margins and of wages were made, they showed that the financial distresses had been followed by a marked decline of the margin (which in April and May had been between 50 cents and 60 cents) and that, in accordance with the agreement, the weaving rate must drop from 23.96 cents per cut to 19.66 cents—a reduction of 17.94 per cent. The spirit in which this, the largest single reduction of wages experienced by Fall River workers, was accepted deserves only the highest commendation.²² The operatives as a whole were as yet unwilling to declare the experiment

¹⁹ For interesting information regarding the methods adopted by the mill men throughout New England to secure uniformity of curtailment see the *Chronicle* of Nov. 16, 1907, p. 1237; Nov. 23, 1907, p. 1301; Dec. 28, 1907, p. 1653.

²⁰ *Chronicle*, Nov. 23, 1907, p. 1301.

²¹ *Chronicle*, Mar. 14, 1908, p. 631; Mar. 28, 1908, pp. 757, 758; May 23, 1908, p. 1293; May 30, 1908, p. 1308.

²² Mr. Lincoln on pages 465, 466 of his article gives in full the statement issued at that time by Mr. James Tansey, then president of the Textile Council. See also Massachusetts Labor Bulletin, No. 60, pp. 263-266.

a failure, although the mule spinners led an attempt to have the agreement abandoned through the required process of serving three months' notice.²³ Instead of abandonment, revision was resorted to in September, when the scale of margins and wages was graduated somewhat more nicely, the intervals between the margins named in the schedule being made uniform at two and one half cents, as is shown below. Another slight change was the making of provision for a delay of two weeks in the enforcement of new rates of wages at the end of each six-month period.

Margins (Cents)	Weaving Rates (Cents)	Margins (Cents)	Weaving Rates (Cents)
115.....	23.96	92.5.....	21.50
112.5.....	23.69	90.....	21.23
110.....	23.42	87.5.....	20.96
107.5.....	23.14	85.....	20.69
105.....	22.87	82.5.....	20.18
102.5.....	22.59	80.....	19.66
100.....	22.32	77.5.....	19.17
97.5.....	22.05	75.....	18.68
95.....	21.78	72.5.....	18.00

In November, 1908, calculation of the margin showed another marked decline, according to which the rates of wages, under the automatic operation of the agreement, were to be expected to drop to the minimum of 18 cents. Instead, the manufacturers waived their rights and allowed the existing rates to continue in force. The situation can best be made clear by quotation from the letter of the Manufacturers' Association to the Textile Council under date of November 19, 1908.²⁴

Believing that indications point to a prosperous season, the Manufacturers' Association is inclined to waive for the present occasion its right under the contract to reduce wages and to suggest, if it be agreeable to the Textile Council, that the present rate of wages be maintained for the ensuing period of six months, it being thoroughly understood that the extra wage thus paid is something over and above what is required by the contract, which still remains binding on both

²³ The whole amended agreement is found on pages 16-18 of the handbook (above referred to) of the Carders' Union.

²⁴ Handbook of the Carders' Union, p. 19. See also Massachusetts Bureau of Statistics, *Annual Report*, 1909, pp. 44-47; *Textile World Record*, vol. 36, pp. 314, 315. *The Textile World Record* said with reference to the action of the manufacturers: "They do this undoubtedly because they believe that insisting on the reduction would be an injustice. This is the practical recognition of the important fact that the wages of textile mill operatives are below the American wage standard" (vol. 36, p. 315).

TABLE 2.—ACTUAL MARGINS AND WAGES UNDER THE AGREEMENT OF MAY 14, 1907.

Dates of wage changes	Average margins for the preceding six-month periods	Weaving rates for the succeeding six-month periods	
		Rates called for by the agreement	Rates actually in force
	(Cents)	(Cents)	(Cents)
May 27, 1907	115.60 ¹	23.96	23.96
Nov. 25, 1907	130.89	23.96	23.96
May 26, 1908	79.00	19.66	19.66
Nov. 26, 1908	60.82	18.00	19.66
May 28, 1909	74.01	18.00	19.66
Nov. 29, 1909	66.90	18.00	19.66
May 30, 1910	66.15	18.00	Agreement abandoned

¹ The margin of profit upon which the weaving rate for the six months following May 27, 1907, was based was the average margin for a period slightly shorter than six months, ending April 30, 1907 (*Chronicle*, May 11, 1907, p. 1129). The other sources of the materials tabulated above are as follows: Lincoln, *loc. cit.*, 463; Massachusetts Bureau of Statistics, *Annual Report*, 1909, pp. 44-47; Massachusetts Labor Bulletin No. 56, p. 4; No. 60, pp. 263-266; *Textile World Record*, vol. 36, pp. 204, 205, 314, 315; vol. 37, pp. 329, 330; vol. 38, pp. 363, 365; vol. 39, pp. 552, 553.

parties and is offered as in some way a substantial recognition of the good faith of the operatives in remaining true to their contractual obligations.

If, therefore, the members of the Textile Council approve this suggestion, and thus indicate their understanding that no precedent is hereby established and that the textile agreement still remains in full force, the arrangement outlined above will become effective.

The *Commercial and Financial Chronicle* gives an additional suggestion of what the conditions were which made this action of the manufacturers possible.²⁵

It is explained [by the manufacturers] that supplies of cotton were secured much below recent quotations; had the manufacturers been forced to buy raw materials and sell products at current quotations, the waiving of the rights would not have been possible.

As is shown in Table 2, the succeeding periods of wage calculation witnessed repetitions of the employers' action of November, 1908. In February, 1910, the operatives, keenly disappointed at the failure of wages to slide upward, voted to withdraw from the agreement. This gave rise to fresh discussion of future rates of wages, and tentative plans were taken up. The proposal of the employees was that of a sliding scale in which 19.66 cents

²⁵ *Chronicle*, Dec. 11, 1909, p. 1509.

TABLE 3.—WAGES, PRICES, AND MARGINS AT FALL RIVER, 1880-1896.¹

Changes of wages			Annual average wages, prices, and margins							
Years	Dates	New weav- ing Base (100)=	Index imbe- weav- ing rates Base (100)=	Weaving	Index numbers of weav- ing Base (100)	Middling upland cotton per pound	28" print cloth per yard	28 3/4" print cloth per yard	Margins	Index numbers of weaving rates Base (100)=21.00¢
		(Cent.)		(Cents)		(Cents)	(Cents)	(Cents)	(Cents)	
1880		21.00								
1881						11.51	4.51	7.41	132.07	
1882			100.00	21.00	100.00	12.03	3.95	7.00	108.52	100.00
1883				21.00	100.00	11.50	3.76	6.50	99.73	91.90
1884	Feb.	18.50	88.10	18.71	89.10	11.88	3.60	6.00	85.79	79.06
1885	Jan.	16.50	78.58	16.78	79.91	10.45	3.36	6.00	87.89	80.99
1886	Mar.	18.15	86.44	17.89	85.20	9.28	3.31	6.00	85.93	79.18
1887				18.15	86.44	10.21	3.33	6.00	97.57	89.90
1888	Feb. 1	19.00	90.48	18.90	90.00	10.03	3.81	6.50	92.58	85.31
1889				19.00	90.48	10.65	3.81	6.50	113.09	104.20
1890				19.00	90.48	11.07	3.34	6.00	108.14	99.64
1891				19.00	90.48	8.60	2.95	6.00	85.92	79.17
1892	July 1	19.60	93.34	19.39	92.34	7.71	3.39	6.25	96.90	89.29
1893	Dec.	21.00	100.00							
1894	Sept. 1	18.00	85.72	20.03	95.38	8.56	3.30	5.25	118.10	108.83
1895	Aug. 3	16.00	76.20	17.34	82.58	6.94	2.75	4.90	92.69	85.41
1896	Apr. 2	18.00	85.72	17.38	82.76	7.44	2.86	5.25	102.47	94.42
1897				18.00	85.72	7.93	2.60	4.66	96.74	89.14
1898	Jan.	16.00	76.20	18.00	85.72	7.00	2.48	4.70	74.21	68.39
1899	Feb. 2	18.00	85.72	16.00	76.20	5.94	2.06	3.96	77.61	71.52
	Dec. 1	19.80	94.28	17.79	84.72	6.88	2.69	4.25	64.90	59.80
1900				19.80	94.28	9.25	3.21	5.00	70.84	65.28
1901				19.80	94.28	8.75	2.84	4.62	81.00	74.64
1902	Mar. 17	21.78	103.72	21.36	101.72	9.00	3.11	5.00	70.38	64.86
1903	Nov. 2	19.80	94.28	21.55	102.63	11.18	3.25	5.00	80.75	74.41
1904	July 25	17.32	82.48	18.55	88.34	11.75	3.44	5.00	66.46	61.24
1905	Oct. 30	18.61	88.62	17.51	83.52	9.80	3.13	4.75	66.18	60.98
1906	July 1	19.80	94.28						70.66	65.12
	Nov. 26	21.78	103.72	19.39	92.34	11.50	3.63	5.12		
1907	May 27	23.96	114.11	23.08	109.92	12.10	4.62	6.00	74.41	68.60
1908	May 28	19.66	93.62	21.39	101.86	10.62	3.50	5.37	106.48	98.12
1909				19.66	93.62	12.68	3.67	5.06	82.69	76.20
1910				19.66	93.62	15.11	3.87	5.62	64.90	59.80
1911				19.66	93.62	13.01	3.54	5.24	59.24	54.59
1912	Mar. 25	21.62	102.96	21.16	100.76	11.52	3.82	5.22	62.82	57.42
1913				21.62	102.96	12.80	3.86	5.40	80.21	73.91
1914				21.62	102.96	11.13	3.48	5.19	73.85	68.05
1915				21.62	102.96	10.14	3.27	5.19	75.18	69.27
1916	Jan. 24	22.71	108.15						78.38	72.22
	May 1	24.98	118.97	24.36	116.00					
	Dec. 4	27.48	130.86							

¹The weaving rates actually in force have been taken from: (1) a table

per cut, the rate then being paid, should be the minimum rate, this to be paid at a margin of 67.5 cents or lower. The maximum rate proposed was 26.03 cents at a margin of 115 cents. Such given by Mr. Lincoln on pages 461, 462 of his article; (2) a table of rates presented on page 22 of the Member's Contribution Book of the Card and Picker Room Protective Association of Fall River and Vicinity; and (3) from tables published from time to time in the *New York Commercial and Financial Chronicle* in the annual report on cotton and cotton manufacture, e.g., Sept. 7, 1907, p. 564. The annual report on cotton is published usually in the early part of September.

The weighted average weaving rate prevailing each year was found by weighting each rate prevailing at any time during the year by the number of weeks the rate was actually in force; e.g., in 1899 the weavers worked 8 weeks at a piece rate of 16 cents, 41 weeks at 18 cents, and 3 weeks at 19.80 cents. The weighted average rate for 1899 is therefore 17.79 cents.

The price data are from M. T. Copeland's *The Cotton Manufacturing Industry of the United States*, Appendix, p. 393, supplemented by figures from the *Statistical Abstract of the United States* (from which Dr. Copeland's figures evidently were taken).

The figures representing the annual average margins of profit are from Dr. Copeland's book (p. 394) for the years up to and including 1910. They are computed by applying the rules for calculating the margin to the price data. The margins for the years 1911-1915 have been computed by the present writer.

In the fourth, sixth, and eleventh columns the actual weaving rates in force, the weighted average weaving rates, and the annual average margins of profit are converted into series of index numbers, using the figures for 1881 as the base (100). This base was selected because (1) it seemed desirable, in the case of the weaving rates, to use as a base a rate that was actually paid at some time, rather than an average of any series of rates; (2) the weaving rate of 21 cents prevailed for a longer continuous time than any other rate in the early part of the period under consideration; (3) the exact date when the weaving rate of 21 cents reported for 1880 became operative is not known to the writer and therefore it has not been possible to find the weighted average rate prevailing in 1880; and (4) it seemed advisable not to go back farther than 1881 for a base, in order to avoid abnormal price and wage conditions which may have existed in the period of the paper money standard.

Chart I presents curves showing for the entire period 1881-1916 the movements of actual rates and of annual average margins. In this chart the scale at the left measures the movements of wages, while that at the right measures the movements of margins.

Chart II shows curves plotted on the figures in the sixth and eleventh columns of Table 3. The purpose of this chart is to assist in studying the correlation between wages and margins, while Chart I is intended to depict the conditions as they existed and for the exact periods in which each set of conditions continued.

In Table 3 and Chart I, 18.61 cents per cut (the average rate under the first sliding scale agreement) is used as the rate prevailing from October, 1905, to July, 1906.

CHART I.—WEAVING RATES AND MARGINS AT FALL RIVER, 1881-1916.
(Actual rates and annual average margins.)

— Weaving rates. - - - - - Margins.

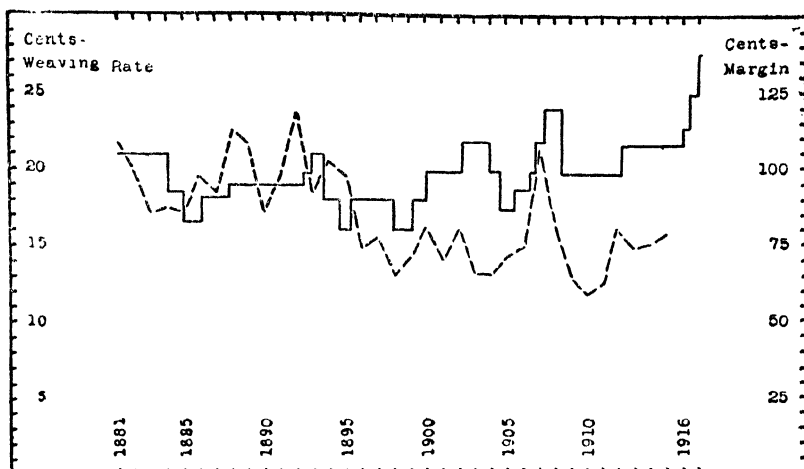
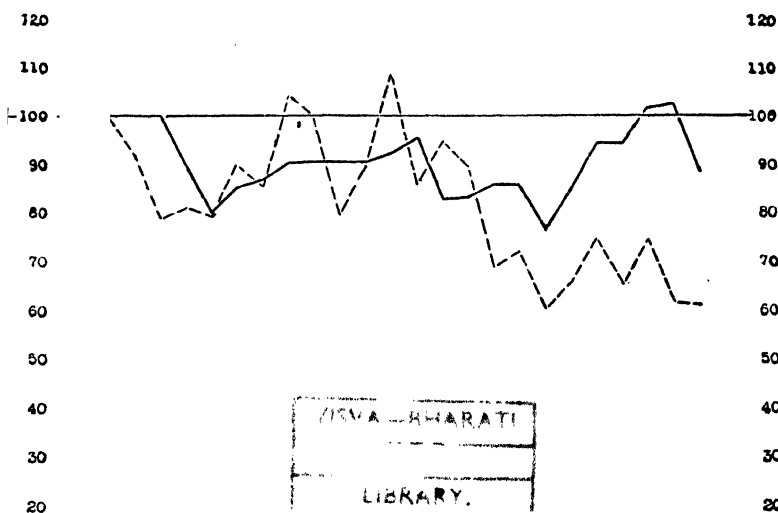


CHART II.—WEAVING RATES AND MARGINS AT FALL RIVER, 1881-1904.
(Index numbers of annual average weaving rates and margins.)

Base (100) = quotations for 1881.

— Weaving rates. - - - - - Margins.



a scale, if adopted, would have meant an advance all along the line of between 8 per cent and 10 per cent. The manufacturers would not agree to such a marked change, being willing to make only a smaller advance on the sliding scale basis. Consequently the sliding scale experiment was abandoned.²⁰

Criticisms of the Experiment

The first general criticism of the Fall River sliding scale experiment is that it did not rest upon an adequate foundation of experience. Table 3 and Charts I and II present the facts relating to the twenty-five years preceding 1905 upon which this criticism is based. Analysis of this material shows: (1) that changes of rates of wages had no consistent relationship to changes in the margin of profit; (2) that there was more accurate adjustment of rates of wages to upward movements of the margin than to downward movements; and (3) that the most important reductions of wages were contemporaneous with business disorders not limited to the cotton manufacturing industry.

In order to secure a more definite expression of whatever relationship may have existed between changes of wages and of market conditions in this industry, Pearson's formula for the coefficient of correlation has been applied to the data of Table 3 in the manner and with the results indicated in Table 4.

TABLE 4.—THE CORRELATION OF WAGES AND PRICES AT FALL RIVER, 1881-1904.

Subject	Relative	Allowance for lag	Coefficient	Probable error
1. Weaving rate	Margin of profit	None	+.0964	±.1355
2. Weaving rate	Margin of profit	One year	+.2297	±.1295
3. Weaving rate	Cloth prices ¹	None	+.4315	±.1114
4. Weaving rate	Cloth prices ¹	One year	+.3506	±.1200
5. Weaving rate	Raw cotton prices ²	None	+.5648	±.0932
6. Weaving rate	Raw cotton prices ²	One year	+.3306	±.1218

¹ Averages of the prices of 28-inch and 38½-inch prints.

² Average annual prices of middling upland cotton.

From this it appears that the correlation between the weaving rate and the margin was smaller than that between the weaving rate and either cotton or cloth prices. This is true even when

²⁰ *Chronicle*, Sept. 10, 1910, p. 622.

allowance is made for a lag of one year in the adjustment of wages to changing commodity market conditions. Rather singularly it appears that the coefficient of correlation between weaving rates and raw cotton prices of the same year is the only coefficient of the six greater than $+.5$ (and if from this coefficient the probable error be subtracted the coefficient falls below the $+.5$ mark); singularly, because, if one assumes a direct causal relationship between margins and wages, one would expect that the increase of cotton prices would tend to lower wages, not to raise them.

Whatever be the explanation of the relative values of these coefficients, we must conclude that the sliding scale agreements were founded upon no basis of experience; that they cannot be regarded as providing a mechanism to secure the frictionless operation of the competitive forces through which wages in this industry had previously been adjusted.

Second, the most elaborate and nicely adjusted system of determination of rates of wages offers no guarantee against unemployment; and we have seen that the Fall River operatives, in their brief experience with the sliding scale, found that curtailment of production by means of short-time operation was still an unsolved problem.

Under unsatisfactory conditions of manufacture the employer has two means of securing relief so far as his relations with his employees are concerned; namely, the reduction of rates of wages and partial or complete stoppage of production. It is evident that the method of a horizontal reduction of wages, particularly of piece rates, presents to the manufacturer the most direct way of reducing costs per unit of product. On the other hand, the successfulness of an attempt to lower rates of wages when the margin is small and when, from the standpoint of the manufacturer, a direct lowering of the cost per unit is most to be desired may be limited, even though indefinitely, by the approach of real earnings to the minimum of the worker's standard of living. As to the conditions of trade, these may be such that the method of rate cutting defeats its own purpose. Rate cutting, by decreasing costs, tends to encourage large production. At a time of overproduction, when the mills have on hand large stocks of goods unsalable except at low prices, the obvious remedy is not further manufacture but short-time operation or dismissal of part of the operative force. For a low cost of production in the immediate future cannot remedy the hardships resulting from high cost of

goods held in storehouses and not marketable at a profit. On the other hand, the partial suspension of work has the advantage of actually curtailing output and also of being able to be effected with less open opposition on the part of employees.

Systematic and combined curtailment of output, although difficult of successful enforcement, has been sufficiently prevalent in the New England cotton manufacturing industry to have an important bearing upon the soundness of the sliding scale plan. It is of considerable importance that this curtailment has occurred with no appreciable seasonal regularity. While it is true that the months of July, August, and September (when mill stocks of raw materials are approaching exhaustion and managers are waiting for the marketing of the new crop) are the months which most frequently show employment below the average for the year, it is also true that this seasonal swing is very slight. Unemployment that occurs irregularly offers greater difficulties to be overcome in wage agreements than that which is regularly recurring.

The following figures, when compared with the content of Table 3, will help to show the importance of the present point of criticism.

UNEMPLOYMENT IN THE MASSACHUSETTS COTTON MANUFACTURING INDUSTRY.

(As measured by the per cent which the number of cotton textile operatives unemployed at some time in each year formed of the average number of employees for that year. Computed from the annual reports of the Massachusetts Bureau of Statistics on the Statistics of Manufactures.)

Years	Per cent of unemployment	Years	Per cent of unemployment
1886.....	10.7	1900.....	4.1
1887.....	7.5	1901.....	8.8
1888.....	10.7	1902.....	3.0
1889.....	2.2	1903.....	13.4
1890.....	2.2	1904.....	24.1
1891.....	1.6	1905.....	5.5
1892.....	1.9	1906.....	2.7
1893.....	23.4	1907.....	2.1
1894.....	27.4	1908.....	19.7
1895.....	3.4	1909.....	3.8
1896.....	19.1	1910.....	7.2
1897.....	12.9	1911.....	9.0
1898.....	10.9	1912.....	9.8
1899.....	3.4	1913.....	7.5

In this period of twenty-eight years there were ten years (1886, 1888, 1893, 1894, 1896, 1897, 1898, 1903, 1904, and 1908) in which the number of cotton textile employees reported to have been unemployed at some time during the year constituted at

least 10 per cent of the average number of employees for that year. Of these ten years, two (1886 and 1888) were years in which this unemployment existed while wage advances were made at Fall River. In two other of these ten years (1896 and 1897) rates of wages at Fall River were unchanged. While in the remaining six years (1893, 1894, 1898, 1903, 1904, and 1908) unemployment existed in the face of very substantial wage cuts. In other words, in these six years wage reduction was supplemented either by part-time operation or by temporary dismissal of a part of the operative force.²⁷ With the particular form of curtailment which caused this unemployment we are not here concerned except to note that at Fall River the tendency has been for the manufacturers to act collectively, to run on part time, and thus to retain the advantages of the existing factory organizations of the labor force.

In an industry in which such conditions as these prevail it cannot be ignored that a sliding scale plan may be ever so finely elaborated solely with reference to rates of wages and still offer no guarantee that the wages thus determined shall actually be paid; for the sliding scale does not assure employment. It merely provides that, if there is employment to be had, compensation shall be on a prearranged plan. If, however, the sliding scale system does sometimes tend to reduce unemployment by bringing about almost frictionless reductions of wages, then it devolves upon the laborer to weigh for himself the alternatives of steady work at low pay or more fluctuating employment at a higher rate of compensation per piece or per hour.

Third, the so-called margin of profit is not adequate to indicate the wage-paying ability of an industry, assuming that the true unit margin of profit can be ascertained and that no difficulty exists to hinder or prevent the collection and utilization of price information in computing this margin.

The philosophy of the sliding scale appears to be this: that it will eliminate from industry the friction of industrial warfare and its consequent social waste, at the same time giving reasonable assurance that the individuals and corporations concerned

²⁷ While the comparison of unemployment in mills throughout the state with wage conditions at Fall River is not as conclusive as might be desired, it is made here, first, because the information available concerning unemployment at Fall River is inadequate, and, second, because Fall River, as the foremost city in the New England cotton industry, is generally considered to typify conditions elsewhere in New England.

shall lose nothing which the operation of competitive forces would secure for them. In a sense the sliding scale is a prosperity-sharing plan. Now it is quite obvious that the prosperity of the cotton manufacturing industry is not a thing to be measured merely by the manufacturer's gross margin of profit. This method of prosperity measurement takes no account of the changing volume of trade under changing margin conditions. It is entirely conceivable that the textile mills of a New England city may secure larger sums available for dividends under conditions of narrow margins and large sales than under conditions of wide margins and small sales. The statistical demonstration that such gains have been made in any particular case is, of course, difficult, if not impossible, since it would require access to the accounts of the manufacturing corporations. Yet the impossibility of proof or disproof is beside the point, for we are not so greatly concerned with what has actually happened as with what may happen under such conditions as have been described.

To these considerations bearing upon the inadequacy of the margin as a basis for wage calculation add another—that the margin as calculated at Fall River was a crude one, which ignored entirely not only the volume of trade but also the existence of fixed charges upon the business.

As concrete evidence of the inadequacy of the margin basis of wage adjustment witness the failure of the Fall River manufacturers to insist upon rigid adherence to the terms of the agreement of 1907, when, in 1908, “believing that indications point[ed] to a prosperous season” they made slight recognition of existing low margins. That the mill owners, through their representatives, were scrupulously insistent that their considerate action should not be regarded as a precedent is beside the point. A schedule of margins and rates of wages had been made the basis of formal agreement, and within eighteen months the schedule was found to rest upon an inadequate foundation.

Fourth, it is doubtful whether it is practicable to find the real margin of profit. The sliding scale agreements are to be criticised on the ground that in the calculation of the margin of profit only two grades of cloth were considered. Although at Fall River there is a greater degree of homogeneity of the cloth products of the mills than is found in many of the New England textile centers, it is true that here at any one time thousands of employees are engaged in the production of cloths other than the 28-inch and

38½-inch prints. If the wages of these operatives are to slide in accordance with changing margins of profit, it would seem no more than reasonable to expect that the margin be calculated with reference to more than two kinds of cloth. For there can be no assurance that the prices of these two cloths are indicative of the cloth market so far as these mills are concerned.²⁸

A similar criticism might be made of the use of quotations on middling upland cotton alone. But this criticism is of minor importance, for there is reason to think that the prices of the several grades of cotton other than the middling upland bear a more constant relation to those of the latter grade than do the prices of all the different cotton fabrics to those of regular and standard prints. However this may be, we are concerned with cotton prices more with respect to the extent to which these quotations are indicative of mill costs, assuming the logically most simple possible condition, namely, that only middling cotton is used by the mills—a condition which is, of course, contrary to fact.

This is a matter which has to do with the times of margin calculation and wage adjustment under a sliding scale. The evil result of weekly calculations has already been indicated in the narrative of the events of the first experiment in 1905-1906. No doubt the six-month basis was an improvement. But there is a difficulty present no matter upon what intervals agreement is reached. There is not much object in averaging raw cotton prices for a week or even for six months with a view to determining wages unless it is known that the cotton used in production was actually bought at the prices averaged. Examination of commercial statistics shows that by far the heaviest buying of cotton stocks by northern mills is in the months of October, November, December, and January of each year. In the five years of the sliding scale experiments an average of over 57 per cent of the takings of cotton by mills in the northern part of the United States and Canada was in these four months.²⁹ The lowest percentage of these takings in these four months (45) was in the season 1907-1908, and the highest (66) in the season 1909-1910. It is evident that any system of basing wages on margins averaged

²⁸ In this connection it is interesting to note that the 28-inch 64 by 64 prints are no longer regarded as typical mill products. The best statistical tabulations of cloth prices now give quotations on 27-inch 64 by 60 prints.

²⁹ This computation is from Shepperson's *Cotton Facts*, edition of Dec., 1907, p. 26; edition of Dec., 1910, p. 26.

for six-month periods ending in May and November does not fairly allow for the uneven distribution of cotton purchases throughout the year. And yet an adjustment of the dates of margin and wage calculations to meet this seasonal fluctuation is not easy, for the fluctuation is not regular.

To make a more positive statement of this criticism—the calculation of margins, if made at all, should be made with a knowledge of the prices at which the mills concerned have actually bought supplies of cotton, and with a knowledge also of the prices actually received from time to time for the mill products. Only in this way can the real margin be ascertained. Probably this criticism is destructive rather than constructive. It is doubtful whether it would be feasible to make a sliding scale agreement which would reveal not only to employees but also to competitors the marketing policies of each corporation.³⁰ The probable result of such an attempt to eliminate labor disputes would be the bargaining of each mill with its own employees and the elimination of collective bargaining on a large scale. It is reasonable to suppose that mill owners would resort to pure profit sharing rather than accept a system which would disclose the methods by which the profits were secured.

Fifth, this experiment was based upon the ungrounded assumption that wages in any one industry can be determined by rules which relate only to the internal affairs of that industry.

The ability of cotton textile operatives to secure an advance or to resist a reduction of wages cannot be measured solely by market conditions within the cotton industry. Margins of profit have to do with the demand for labor; but they are not directly related to its supply. The latter cannot be regarded as a fixed or even steadily growing quantity. It varies on the one hand with population changes, both quantitative and qualitative. That labor supply tends to conform to labor demand is a mere truism, which means that the number of goods or services sold must be equal to the number of goods or services bought. But the demand for textile operatives is not the only demand which textile operatives can supply. Within the last two years textile workers have found a demand for their services in munitions plants,³¹ and this fact has probably exerted no inconsiderable influence in enabling

³⁰ See the statement of Mr. Edward Stanwood, secretary of the Arkwright Club of Boston, in a review of Dr. Copeland's book in the *AMERICAN ECONOMIC REVIEW*, vol. III (June, 1913), p. 372.

³¹ *Chronicle*, Aug. 29, 1916, p. 677.

these operatives to receive in 1916 advances in wages aggregating about 30 per cent. It must be evident that any formal agreement, however elaborately drawn, cannot be expected to guarantee to either workers or their employers all that could be secured by hard bargaining under competitive conditions. That is, at comparatively frequent intervals the whole sliding schedule would have to be considered anew. *Ipso facto* the scale would not slide; it would become a new scale.

This brings us to a final critical comment upon the sliding scale plan: that the detailed construction of a schedule of margins and wages, in the last analysis, is a matter of the comparative bargaining powers of employers and employees.

As we have seen, the sliding scale experiment was abandoned in 1910; first, because the employees were dissatisfied with the failure of the rates of wages to slide upward, and, second, because they were unable, in considering the extension of the agreement, to raise the whole scale of rates to a level satisfactory to themselves. In spite of the fundamental unsoundness of the whole scheme, it is not improbable that it would have been continued in operation later than the spring of 1910, if both sides had been able to agree upon a schedule.

The difficulty seems to be that there is no criterion by which the economic correctness of any proposed schedule may be judged. What would be an economically correct schedule? Presumably such would be a schedule which would accord to either party all that could be secured by the most vigorous and keen bargaining. Or, to put the question in another form, what is the criterion of the wage-paying ability of an industry? We do not know. The answer is still in process of being evolved in the cases of public and quasi-public utilities. Governor Douglas, in 1905, when arbitrating the wage dispute at Fall River, made certain allowances for dividends and for depreciation. But other authorities might make different allowances for the same items. This is a difficult problem, especially in the case of the Fall River mills, regarding whose capitalization comparatively little is publicly known.³²

The answer to the last two criticisms (that adjustments of any sliding schedule must be made periodically to meet changing industrial conditions and that there is no criterion by which the sliding schedule may be made accurately to reflect the state of competitive markets for labor) may be of this nature: that great

³² Cf. Copeland, *op. cit.*, ch. 15.

nicety of adjustment is not to be expected in such a schedule; that some gain will be effected if only the wastes of industrial conflict can be avoided; and that "in the long run" one side will gain through this inaccuracy of adjustment as much as the other. Of this last contention, however, there is no certain proof. While it might be safe to rely upon this supposed tendency to equalize advantages and disadvantages thus arising, if the sliding wage scheme were fundamentally sound, we have seen that in the Fall River case, at least, this soundness did not exist.

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THE WAR AND TRANS-PACIFIC SHIPPING

Ocean freight rates are popularly said to be determined by demand and supply—that is, by the ratio between the freight offered for shipment and the vessel tonnage available for carrying this freight. As competition is a very potent force in water transportation, this ratio constantly changes with variations in the movement and volume of trade and in the enlargement or contraction of available vessel tonnage. The phenomenal rise of ocean freight rates since the outbreak of the present European war has been due in the main to the withdrawal of the great mercantile fleet of Germany from ocean commerce and the requisition of a large proportion of the better class of mercantile tonnage for war purposes by the allied governments. And the destruction of vessels by submarine activity has contributed its share to the increase in ocean freight rates.

Some marked changes in the nature of trans-Pacific trade and shipping have been wrought by the rise of transportation costs on ocean highways. The trade of China has had need of more vessel tonnage than before the war, and thousands of tons of Chinese products offered for export have been unable to find space, while corresponding amounts of imports could not be booked because of the lack of vessel tonnage. Shipment of American lumber and flour is seriously limited, if not rendered impossible, with present freight rates. The export of American kerosene to China is materially reduced because of a hundred per cent increase in price, due to the rise of transportation costs.¹ Complaints of lack of space and high freight rates are also made in the Philippines and in Australia.²

Before the war freight rates across the Pacific Ocean were among the lowest for any similar haul in the world. Competition from Japanese subsidized lines made it practically impossible for other concerns to remain in the trans-Pacific service without the financial support of or actual ownership by American railroad companies. The Pacific Mail Steamship Company, by far the most important of the American trans-Pacific lines, was controlled by the Southern Pacific Company. The Great Northern Steamship Company operating the largest steamer flying the American flag (the Minnesota) was owned by the Great Northern Railway

¹ Bureau of Foreign and Domestic Commerce, Miscellaneous Series, No. 44, p. 7.

² Daily and Consular Trade Reports, 1915, No. 95, p. 386.

Company. Neither of these companies can be said to have been a financial success during the years immediately preceding the war. Charges in the coasting trade in the Orient were such that most of the coast shipping companies had difficulty in staying in the business. On the Chinese coast, British and other lines were restricting their services, passing dividends, and even selling ships and withdrawing from trade.³

Even before the war, then, British and American shipping was feeling the effects of Japanese competition, which was intensified by the government's policy of granting special subsidies to the great line companies. These companies were slowly increasing their proportion of the total trans-Pacific trade. A very small part of this trade was carried in tramp vessels.⁴ The principal reason for the insignificant role played by the tramps was that the freights offered line vessels were distributed with fair uniformity throughout the year and exhibited no great fluctuations from one year to another. This comparative uniformity enabled the Pacific conference, to which the line companies—American, British and Japanese—belonged, to keep the tramp for the most part out of the trans-Pacific trade. The potential rather than the real competition of the tramp, however, kept freight and passenger rates low. Trade was steady, but rates enabled British, American, and German lines to live only at "the minimum of subsistence."

The outbreak of war reduced the vessel tonnage of the Pacific at a time when the freights offered for shipment showed a marked tendency to increase. Readjustments in shipping, on account of the mercantile tonnage taken from the ordinary channels of trade, favored Japan, which was far from the scene of belligerent activities. This country experienced an increased demand for its products, and, being well equipped to supply munitions of war, developed a great trade. Its large mercantile marine was obliged to devote the major portion of its facilities to assisting Japanese

³ Daily Consular and Trade Reports, 1914, No. 284, p. 1017.

⁴ The writer was informed by the foreign department of the San Francisco Chamber of Commerce that in ordinary times about 2 to 5 per cent of the freight passing in and out of that port is carried by tramps. The term "tramp" is here used to designate a vessel operating over no regular route and with no regular schedule of sailings. A chartered vessel operating over a regular route but with irregular sailings is not a tramp. The percentage of transoceanic freight carried by tramps was apparently larger in some of the ports of the Northwest than at San Francisco. But at San Francisco and Seattle, the two most important American ports on the Pacific, the proportion of freight carried by tramps was small.

trade. The withdrawal from business of the old Pacific Mail Steamship Company and the sale by that company of some of its steamers to the Toyo Kisen Kaisha in the fall of 1915⁵ materially increased the hold of Japan upon the trans-Pacific trade. The general trend may be indicated by comparing the ownership and tonnage of "line" vessels operating in the transoceanic trade between China, Japan, and Asiatic Russia, on the one side, and the Pacific coast of Canada and the United States, on the other, in July, 1914, and May, 1916.⁶

TABLE 1.—OWNERSHIP AND TONNAGE OF TRANSOCEANIC TRADE BETWEEN CHINA, JAPAN, AND ASIATIC RUSSIA, AND THE PACIFIC COAST OF CANADA AND THE UNITED STATES.

JULY, 1914

	Number of steamers	Gross tonnage	Net tonnage	American ports of call
American flag—				
Pacific Mail	5	54,898	31,992	San Francisco
Great Northern	1	20,718	13,324	Seattle
Robert Dollar S. S. Co.	1	5,356	3,685	San Francisco
Total American	7	80,972	49,001	
British flag—				
Pacific Mail	2	10,244	8,929	San Francisco
Canadian Pacific	5	51,737	27,624	Vancouver
Royal Mail and Glen Line	8	47,039	29,774	Seattle, Tacoma, & Portland
Blue Funnel Line'.	3	29,423	18,781	Seattle & Tacoma
Robert Dollar S. S. Co.	2	8,633	5,602	San Francisco
Total British	20	147,076	90,710	
German flag—				
Hamburg-American Line	6	35,090 ¹	22,582 ¹	Seattle, Tacoma, & Portland
Japanese flag—				
Nippon Yusen Kaisha	6	38,106	23,235	Seattle
Toyo Kisen Kaisha	5	52,875	28,704	San Francisco
Osaka Shosen Kaisha	6	36,706	22,772	Seattle
Total Japanese	17	127,687	74,711	
Grand Total	50	390,825	237,004	

¹ Tonnage estimated for two steamers of Hamburg-American Line.

⁵ Commerce Reports, October 16, 1915, p. 226.

⁶ The names of companies are taken from the publications of the Bureau of

TABLE 2.—OWNERSHIP AND TONNAGE OF TRANSOCEANIC TRADE BETWEEN CHINA, JAPAN, AND ASIATIC RUSSIA, AND THE PACIFIC COAST OF CANADA AND THE UNITED STATES.

MAY, 1916

	Number of steamers	Gross ton- nage	Net ton- nage	American ports of call
American flag— China Mail	1	5,060	3,186	San Francisco
British flag— Canadian Pacific	4	45,803	24,570	Vancouver
Dollar Line	2	8,633	5,602	San Francisco
Blue Funnel Line	3	29,423	18,781	Seattle & Tacoma
Total British	9	83,859	48,953	
Dutch flag— Java-China-Japan	4	36,000	. . .	San Francisco
Japanese flag— Nippon Yusen Kaisha . . .	6	37,788	23,038	Seattle
Toyo Kisen Kaisha	8	75,233 ¹	41,998 ²	San Francisco & Los Angeles
Osaka Shosen Kaisha . . .	7	49,511	30,569	Seattle
Total Japanese	21	162,532 ¹	95,605 ²	
Grand Total	35	287,451 ¹	147,744 ³	

¹ Including one steamer of the Toyo Kisen Kaisha whose gross tonnage is estimated.

² Including three steamers whose net tonnages are estimated.

³ Including three steamers whose net tonnages are estimated and excluding the net tonnages of four steamers of the Java-China-Japan Line.

Of the aggregate of over 390,000 gross tons which was engaged regularly in trans-Pacific trade before the war, about 20 per cent sailed under the American flag, about 37 per cent under the British flag, and about 33 per cent under the Japanese flag. The gross tonnage of the vessels operated by the Hamburg-American Line was a little over 35,000, or less than 10 per cent of the total.

Foreign and Domestic Commerce, Miscellaneous Series, No. 44, for the year 1916, pp. 9-11. Vessel tonnages are those of Lloyd's Register of British and Foreign Shipping, List of American Merchant Vessels, published by the Bureau of Navigation, and in three or four cases rough estimates of tonnage on the basis of carrying capacity given in Miscellaneous Series, No. 44, above mentioned.

Tramps did not play a prominent part, and a liberal allowance for these vessels would probably not raise the total above 420,000 or 430,000 gross tons.

It is evident from the figures tabulated above that no nation could, in July, 1914, claim a predominant position in the trans-Pacific carrying trade. The gross tonnage of vessels flying the British flag (147,076, approximately 37 per cent of the total for line vessels) was greater than that of any other nation. Owing to the infrequent service of the Royal Mail and Glen Line and the rather small freight-carrying capacity⁷ of the fast steamers of the Canadian Pacific, the proportion of the annual cargo-carrying capacity offered by British ships in the trans-Pacific trade was considerably smaller than its total gross tonnage. The estimated annual cargo-carrying capacity of all the vessels so engaged was at that time 1,400,000 tons. Of this regular carrying trade the American steamers had about 25 per cent, Japanese 26 per cent, and British 30 per cent.⁸

The total gross tonnage of vessels regularly operated in the trade in May, 1916, was approximately 287,000, or about 26 per cent less than the regular tonnage before the war. Of this tonnage, less than 2 per cent was American, 30 per cent British, 13 per cent Dutch, and over 55 per cent Japanese. Not only did the three great line companies of Japan engaged in the trans-Pacific service increase their proportion of the total gross tonnage, but they also augmented the number and tonnage of their steamers, while the tonnage of other nations (excepting the Dutch who became regular carriers after the opening of the war) materially declined or was withdrawn.

The predominance of Japan is still further accentuated by the increase in the number of tramp steamers. Since the outbreak of the war many tramp steamers have entered the field and are now carrying full and profitable cargoes.⁹ It was estimated in the

⁷ The gross or net tonnage of a vessel does not correspond to its cargo-carrying capacity. On fast steamers a large proportion of the space is likely to be devoted to passenger and mail service. The freight transported on such vessels is usually small in bulk and high in value.

⁸ Miscellaneous Series, 1916, No. 44, p. 8.

⁹ It is difficult to make any close estimate of the proportion of trans-Pacific freight carried in tramp vessels, as many "tramps" are operated for the present over definite routes. The writer was told at the foreign department of the Chamber of Commerce of San Francisco that about 75 per cent of the freight now passing through that port goes in chartered vessels or "tramps." However, a considerable part of this freight goes in steamers chartered by the regular line companies.

summer of 1916 that Japanese owners possessed some 272 tramp steamers aggregating 715,000 gross tons, of which 34 with a combined gross tonnage of 130,000 were operated in the trans-Pacific trade. This tonnage must be added to that of the regularly operated steamers of the three Japanese line companies above tabulated. While American tramps are operating in this transoceanic service, their number is relatively small. The addition of Japanese tramp steamers thus increases very materially Japan's predominant position.¹⁰

In August, 1916, the new Pacific Mail Steamship Company began its trans-Pacific service. Three steamers were purchased, the Ecuador, the Venezuela, and the Columbia. These vessels are now sailing under the American flag between San Francisco and the Orient. Each has a gross tonnage of 5,687.¹¹ The vice-president and general manager of the Pacific Mail Steamship Company is reported¹² to have recommended recently the immediate expenditure of \$10,000,000 to \$15,000,000 in the improvement of its trans-Pacific service, the money to be used in the purchase or construction of two 25,000-ton liners and two or three intermediate liners. The carrying out of these plans would go far toward restoring the American flag to the Pacific where a much larger proportion of our foreign trade had heretofore been carried in American vessels than on the Atlantic coast.

In addition to the Pacific Mail and China Mail, both operating vessels under the American flag, several American tramp steamers under time charters have appeared in this trade during the last two years. Other American ships, according to indications, are likely to operate in the near future. The entrance of the United States into the present European conflict may check this development and allow Japan to increase still further her hold on the trans-Pacific service.

The outbreak of the war caused a material reduction in the vessel tonnage regularly operating between the Orient and the Pacific coast of the United States and Canada. While this reduc-

¹⁰ This predominance is more strongly stated in Commerce Reports, 1915, No. 243, pp. 226 and 227. The Japanese tonnage available for the trans-Pacific trade is there given as 430,000 out of a total of 490,000. This figure, however, is in excess of the tonnage engaged *solely* in the trans-Pacific business, even including the tonnage operating between Japan and the Pacific coast of South America.

¹¹ Annual Report of the Pacific Mail S. S. Co., 1916, p. 14.

¹² *Seattle Post-Intelligencer*, March 31, 1917.

tion was offset in part by the increased number of tramps operating between the two coasts, the irregularity of tramp service has kept the annual cargo-carrying capacity somewhat below what it was before the war. The freight moved, however, has increased in value. A comparison of the exports and imports of the Pacific coast of the United States between the year closing June 30, 1914, and the year following will show approximately the extent of this increase for the United States during the first year of the war.¹³

Period	Imports	Exports including re-exports	Total
Year closing June 30, 1914	\$138,478,715	\$136,243,148	\$274,721,863
Year closing June 30, 1915	158,858,408	173,685,617	332,544,025

Since June 30, 1915, the commerce of the Pacific coast has greatly increased, due in part to the exports to Asiatic Russia. During the first year of the war the exports from the United States to Siberia leaped from \$1,214,506 to \$23,353,151, more than one half of which was shipped through the Washington customs district.¹⁴ During the first eight months of 1916 the shipments from Puget Sound ports alone to Vladivostok amounted to over \$78,000,000.¹⁵ The three most important items among these exports were commodities used largely for war purposes:

Upland cotton	\$17,071,126
Gun powder	15,489,265
Other explosives	10,582,264
	\$43,142,655

Much of this growth in trade represents increased values rather than increased freight tonnage. The fact remains, however, that on the Pacific coast the war conditions which produced a shortage of shipping facilities also contributed to an augmented demand for vessel tonnage.

The effect of this situation in the trans-Pacific shipping is noticeable in two directions—the industrial condition on the Pacific coast due to the lack of an adequate vessel tonnage, and the utilization by Japan of her predominant position in the transoceanic

¹³ Figures taken from the volumes on *Commerce and Navigation of the United States* for the years 1914 and 1915.

¹⁴ *Ibid.*

¹⁵ *Seattle Times*, Oct. 5, 1916, Statement of Mr. W. B. Henderson, the Seattle representative of the Federal Bureau of Foreign and Domestic Commerce.

trade to give her own industries an artificial advantage in the commerce of the Pacific.

A large percentage of the commodities produced for export on the Pacific coast are of low value in proportion to bulk. In the year closing June 30, 1914, the fiscal year immediately preceding the war, the exports from all the customs districts of the Pacific coast of the United States aggregated \$134,806,148.¹⁶ Of this amount over half consisted of breadstuffs, wood and manufactures of wood, mineral oil, canned salmon, and fruit. The greater part of the remainder embraced articles shipped from eastern points to the Orient through Pacific coast ports. The groups of commodities mentioned are for the most part those which move readily only when rates are low. The increase in ocean rates following the outbreak of war greatly interfered with the industries producing some of these articles.

The leading manufacturing industries of the Pacific Northwest are the lumber and milling industries. During the first year of the war the exports of lumber from Washington and Oregon fell off about 50 per cent. The exports of lumber from the Pacific Northwest have in recent years gone principally to Australia, China, the west coast of South America, and to Europe. The secretary of the Pacific Lumber Bureau, an organization of Oregon, Washington, and British Columbia tidewater mills, recently made a report¹⁷ showing the shipments of lumber from tidewater points within this area and the distribution of these shipments. His figures cover the first nine months of the year 1916 and the monthly shipments during several preceding years. A comparison between the first nine months of 1914 and of 1916 shows the following:

Destination	1914	1916
	(<i>M feet</i>)	(<i>M feet</i>)
Australia	155,138	71,158
West coast of South America .	72,618	44,684
China	114,537	32,884
United Kingdom and continent	32,069	57,053

The shipments to all these destinations except Europe were much smaller in 1916 than in 1914. Of the shipments to the United

¹⁶ *Commerce and Navigation of the United States, 1914.*

¹⁷ *Seattle Times*, November 26, 1916.

Kingdom and Europe a large part was made by rail across the continent for reloading on vessels at New Orleans, New York, and Boston. This routing was due to the scarcity of vessel tonnage in the North Pacific waters.

In ordinary years the flour exported from Puget Sound and Portland goes to China and Japan. Owing to the high prices of breadstuffs, the shipments of flour from the Pacific Northwest remained large during the first year of the war.¹⁸ The subsequent increase in rates and the more limited space offered by ocean liners have seriously handicapped the milling industry in this region of the country. One of the most prominent owners of flouring mills in the Northwest is quoted as saying:

War conditions—presented most prominently in the shortage of carrying bottoms and the high cost of grains—are making the flour milling industry one of many troubles at present. The scarcity of shipping facilities is affecting this industry probably more than any other. . . . There is plenty of flour available, however, at the market price. After the flour is manufactured transportation to carry it to the many highly developed markets is practically unobtainable.¹⁹

Flour shipped from Puget Sound to China is allotted on Japanese liners only two fifths of the space formerly allowed.²⁰ The balance must seek markets elsewhere or go on chartered vessels at much higher rates.

The lumber produced in the Northwest is marketed for the most part in states and countries bordering on the Pacific Ocean or in the Rocky Mountain and western Mississippi Valley states. Shingles constitute the only important wood product of this region that is sold throughout the United States. Practically all the wheat flour produced in Washington and Oregon is ordinarily marketed in the Pacific coast states and in the Orient. The Oriental after adding the ocean freight charges on flour to the price prevailing on the Pacific coast now finds that price prohibitive.

Hence, both the milling industry and the lumber industry suffer from a greatly restricted market due to a limited vessel tonnage operating between the eastern and western coasts of the

¹⁸ *Commerce and Navigation of the United States*, 1915. From Puget Sound the exports of flour increased in value from \$8,349,400 for the year ending June 30, 1914, to \$8,568,156 for the year ending June 30, 1915.

¹⁹ *Seattle Times*, March 19, 1917.

²⁰ Testimony of W. B. Henderson in Hearings before the Committee on Merchant Marine and Fisheries, House of Representatives, 64 Cong., 1 Sess., first series, pp. 794 and 795.

Pacific. It is true that wheat produced in eastern Washington, Oregon, and Idaho is shipped by water in large quantities to foreign markets, but this export wheat nearly all goes by way of the Panama Canal to Europe, and does not figure to any large extent in the trans-Pacific trade.²¹ On account of the depression which has prevailed in the lumber and milling industries, the Pacific Northwest has not been to any marked degree a participant in the "war prosperity" enjoyed by other sections of the United States.

Like conditions prevail elsewhere along the Pacific. Some months after the outbreak of the war the American consul at Victoria, British Columbia,²² stated that certain kinds of exports which usually pay the lowest freights and which cannot now be profitably shipped on account of the higher charges are being severely restricted. "The high freight rates and lack of ships have been responsible for quite a set-back to the lumber business, and much complaint is voiced by the lumber interests on that account." On the other side of the Pacific the depression of certain industries due to increased freight rates is a matter of widespread complaint. Throughout the Orient there is a clamor for space on vessels going to the United States and the United Kingdom. The rates on sugar and hemp from the Philippines to the United States were raised during the first year of the war from \$7.50 and \$15 per ton, respectively, to \$20 and \$45.²³ Nominal rates below the latter were quoted by conference lines, but shippers were notified that tonnage could not be provided.

On Chinese foreign trade the immediate effect of the European war was complete paralysis. Export trade, however, is not so vital a factor of economic life in China as in countries more highly developed industrially. The exports of this country consist of raw materials and products of the soil rather than manufactured goods. All the industries producing these commodities were affected, to the extent that they were dependent upon foreign markets, by the increase in ocean freight rates. But conditions rapidly readjusted themselves, and within a few months there began to spring up a demand for materials to be used in connection with the war and for articles formerly supplied to neutral

²¹ The writer has discussed the effect of changes in the price of wheat on the milling industry of Washington in an article in the *Political Science Quarterly*, September, 1909.

²² Daily Consular and Trade Reports, 1915, No. 54, p. 923.

²³ Daily Consular and Trade Reports, 1915, No. 95, pp. 386 and 387.

nations by the belligerent powers that were no longer able to furnish them. There was an increased demand for Chinese cotton, antimony, albumen, aniline dyes, indigo paste, egg products, hides, skins, straw braid, pig iron, wool, and silks. The abolition of the use of alcoholic drinks in Russia increased the demand for Chinese tea.²⁴ Most of these products, being of smaller bulk in proportion to value than many of the former exports of China, were able to bear the increased rates, and are now exported in large quantities to the United States as well as to European countries.

The effect of the reduction of shipping facilities in the trans-Pacific trade has thus been a depressing one on most industries producing commodities whose movement depends upon low or moderate rates. Where such industries dominate as they do in the Pacific Northwest there has been business depression.²⁵ Another, though subordinate, factor in this situation is the relationship existing between the transcontinental railroads of the United States and the transoceanic steamship lines. The latter usually favor large and regular shippers in the matter of rates and service. Regular shippers will secure space allotments in preference to those shipping at irregular intervals. The transcontinental railroads as regular shippers have an understanding with the Japanese lines for practically all their space. The local exporter has been left out of the deal, and hence must either go out of business or fall back on chartered vessels with their much greater advances in rates.²⁶

The predominant position of Japan in the trans-Pacific trade is apparently being utilized to foster her industries. The advances in ocean freight rates by the Japanese lines engaged in this service are noticeably different for commodities moving east and for those moving west. These advances are, in the main, on American freight moving to the Orient rather than on Japanese goods carried to America. In fact, the increase in rates on Japanese freight, while appreciable, has been slight compared with the rise in ocean

²⁴ Bureau of Foreign and Domestic Commerce, Miscellaneous Series, No. 44, p. 12.

²⁵ The wheat farmers of eastern Washington, Oregon, and Idaho have shared in the country's prosperity as have wheat farmers elsewhere. The high price of wheat in European markets enables wheat dealers in Tacoma, Seattle, and Portland to meet the high freight charges.

²⁶ Testimony of W. B. Henderson in Hearings before Committee on Merchant Marine and Fisheries, H. R. 64 Cong., 1 Sess., pp. 794 and 795.

transportation costs generally. In all advances of rates by Conference Lines on the Pacific the government of Japan, controlling the policies of the leading Japanese lines by the payment of subsidies, has prevented any very marked increase in rates on commodities in whose production Japan is interested.²⁷ In other words, these lines by virtue of the subsidies paid them are to control transportation charges in the interest of Japanese trade.

In the following table a comparison is made between the advances in quoted rates on some of the principal Japanese exports to the United States and some of the leading American exports to the Orient. While the published tariffs of steamship lines do not in all cases represent the actual charges imposed, they do serve as a rough index of what the shipper has to pay. In the case of freight moving east on the Pacific, the rates are those from the

TABLE 3.—FREIGHT RATES FROM JAPAN TO AMERICA.

Commodities	Before the war ¹	Effective April 1, 1916 ²
Silk (raw or spun) in bales . .	\$0.03 per lb. net	\$0.036 per lb. net
Silk goods, in cases	15.00 M ³ (+ ½% ad valorem)	18.00 M (+ ½% ad valorem)
Tea	5.50 M, net	6.60 M, net
Copper, in slabs	4.50 W	5.40 W
Copper, raw	3.00 W	4.00 W
Linen goods, provided declared value does not exceed \$900 per ton	7.50 M	9.00 M
Porcelain, with declared value not exceeding \$100 per 40 cubic feet	6.50 W/M	7.80 W/M
Camphor (refined) in tins	10.50 M	12.60 M
Camphor (crude)	8.50 M	10.20 M
Matting, in rolls	5.50 M	6.60 M

¹Trans-Pacific Tariff Bureau (Japan Branch), Freight Tariff No. 3, Yokohama, May 15, 1913.

²Tariff of Nippon Yusen Kaisha. Effective April 1, 1916. Announcement of a further increase of from 20 to 30 per cent in some of these rates has just been made at the offices of the three Japanese lines (*Seattle Times*, April 17, 1917). The announcement, however, does not materially change the situation with reference to the rates on Japanese and non-Japanese products.

³Ocean freight rates are usually quoted by the ton. The freight ton, however, may be a measurement ton of 40 cubic feet of space or a weighted ton of 2,000 pounds. If the former, the rate is often quoted as so much per M; if the latter so much W. If the option of using one or the other standard is left with the steamship company the quotation is often so much W/M.

²⁷Commerce Reports, 1915, No. 243, p. 226.

Japanese ports of Nagasaki, Moji, Kobe, Yokkaishi, Shimidzu, and Yokohama to the American (including Canadian) ports of Victoria, Vancouver, Seattle, Tacoma, and San Francisco. In the reverse direction the rates apply to the American ports named, except San Francisco in the case of the rates effective November 2, 1914, and the Japanese ports of Yokohama, Kobe, Nagasaki, and Moji, the Chinese port of Shanghai, Hongkong, and Manila, P. I.

TABLE 1.—FREIGHT RATES FROM AMERICA TO THE ORIENT.

Commodities	Effective	Effective Dec. 1, 1916 ²	
	Nov. 2, 1914 ¹	Yokohama, Kobe Moji, Nagasaki	Shanghai, Hong- kong, Manila
Cotton (raw), machine com- pressed	\$8 W	\$18 W/M	\$20 W/M
Machinery, single package not exceeding 4,000 lbs.	8 W	18 W	20 W
Iron and steel articles	4 to 10 W	20 W	20 W
Leather in rolls	15 W	15 M	18 M
Canned goods in cases	7 W ³	18 or 20 W ⁴	20 or 22 W ⁵
Grain and grain products (not including wheat and flour)	5 to 10 W/M	18 W/M	20 W/M

¹ Pacific Coast-Oriental Tariff Bureau, Freight Tariff No. 13. The rates in this tariff while higher than those prevailing before the war are still low compared with those of 1916 or 1917. The big advances early in the war were made by tramp vessels rather than by the regular liners.

² Pacific Coast-Oriental Tariff Bureau, Joint Tariff No. 14. The rates in this tariff apply to shipments from San Francisco as well as the more northern ports.

³ The rate to Hongkong, and Manila is \$8.

⁴ If strapped at both ends, \$18; if unstrapped, \$20.

⁵ If strapped at both ends, \$20; if unstrapped, \$22.

The rate on flour which is one of the most important exports of the United States to Japan and China is not quoted in the general tariffs. Before the war \$5 a ton was considered a high rate to either of these countries. Early in 1917 a special tariff quoted a rate of \$15 a ton to Japanese and Chinese ports and \$17 to Manila.²⁸ Charter rates on flour were quoted at \$20 per ton to Japan and \$25 to Vladivostok.²⁹ Rates on lumber, which generally goes in chartered vessels or in vessels owned by lumber companies, are not quoted in the general tariffs. A special tariff pub-

²⁸ *Seattle Times*, Feb. 25, 1917.

²⁹ Letter at Seattle office of Bureau of Foreign and Domestic Commerce.

lished in February, 1917, gives a rate of \$25 per thousand board feet to Japan, China, and Manila. Before the war \$12 per thousand board feet was a common rate.³⁰

It will be noted that the advance in rates on commodities moving from Japan to the Pacific coast of North America has been relatively slight; on the articles quoted no advance was greater than $33\frac{1}{3}$ per cent.³¹ Raw silk, which in the fiscal year immediately preceding the war formed about 66 per cent of the value of our entire imports from Japan, shows an increase of only 20 per cent. Tea, which ranks next to raw silk in importance, and silk goods show the same percentage of increase.

On commodities moving from the United States and Canada to China and Japan there are few rate advances of less than 100 per cent between November, 1914, and December, 1916. On important articles of commerce the increase in rates is from 100 to 300 per cent. Because of the demand for vessel space the actual advances are in many cases greater than those indicated in the published tariffs. By November, 1914, ocean freight rates on the Pacific had shown material advances, and hence the total increase between the period immediately preceding the war and December, 1916, is greater than that shown in the above table. On flour the special tariffs show an increase of 200 per cent when carried by regular line vessels and a greater increase when moved by chartered vessels. The transportation charge on raw cotton advanced from 125 to 150 per cent between November, 1914, and December, 1916.

The difference in the upward movement of rates between commodities moving east and those moving west may be considered in relation to the westward diversion of traffic due to war conditions. As already pointed out, the exports from Puget Sound to Asiatic Russia have enormously increased during the past two years. Practically no freight at present moves from Asiatic Russia to the Pacific coast of the United States. The westward movement from Japan to Europe has also increased. On account of the preponderance of the westward over the eastward movement, the Nippon Yusen Kaisha has started a round-the-world service from the Far East to London via Hongkong, thence returning to the Orient via

³⁰ *Seattle Times*, Feb. 25, 1917.

³¹ The advance is greater in the case of some commodities than the quoted rates would indicate. Before the war the commodities enumerated, with the exception of raw silk, silk goods, and tea, were subject to a deferred rebate of \$1 per ton weight or measurement. This rebate, the writer was told, has been discontinued since the war began.

*the Panama Canal and the Pacific coast of the United States.*³² The company employs ten ships of 69,000 tons in this round-the-world freight service.³³

Notwithstanding the heavy westward movement of freight it can hardly be said that the relatively small advances in rates from Japan to the United States on the great Japanese liners are to be looked upon in the light of low rates for return cargoes. Aside from the heavy shipments to Vladivostok, from which little or no return freight is carried, the trans-Pacific traffic shows a larger movement from the Orient to the Pacific coast of the United States than in the reverse direction. Rates from Hongkong and Manila on line steamers not touching Japan have advanced almost as much as those on freight from America to the Orient.³⁴ With the exception of raw silk, whose transportation charge has increased from 3 to 4 cents per pound, the advances have been from one hundred to several hundred per cent.

The moderate increase in rates on Japanese products going on subsidized liners across the Pacific has the appearance of a conscious effort to foster by discriminatory charges home industries. The comparatively high rates on commodities destined for the Orient act as a sort of protective tariff, while the low rates on Japanese products combined with high prices in the world market practically amount to indirect bounties on her exports. With her predominant position on the Pacific Japan is apparently using her large mercantile fleet to increase her export trade and develop the industries serving this trade. The reduced allotment of vessel space for flour shipments from the Pacific Northwest to China, already referred to, is in accordance with this policy. It is commonly asserted and believed that this reduction is made in the interest of the milling industry of Japan which is gradually capturing the Chinese markets.³⁵

Discriminatory rates in favor of the country under whose flag a vessel sails are not uncommon. British vessels operating between New Zealand and New York and London have recently quoted lower rates on New Zealand products shipped to London than on those shipped to New York, although the latter port is nearer to

³² Commerce Reports, 1915, No. 220, p. 1370.

³³ *Ibid.*, p. 1371.

³⁴ Trans-Pacific Tariff Bureau, Hongkong, Local Freight Tariff, No. 2 A. Effective January 15, 1916.

³⁵ Testimony of W. B. Henderson before House Committee on Merchant Marine and Fisheries, H. R. 64 Cong., 1 Sess., pp. 794 and 795.

New Zealand and until April, 1917, was a neutral port entirely without the war zone. This discrimination in favor of London has persisted whether the vessel sails directly to New York and thence to London or to New York via London.³⁶ While this instance is a case of discriminatory rates on imports to a home port as against a foreign port more favorably situated, the protective effect is none the less apparent. In this illustration there is no conscious effort on the part of the English government to favor home industries. Japan, however, seems to have taken advantage of her position as the dominant carrier in the trans-Pacific commerce to develop her export trade in true mercantilistic fashion.

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³⁶ Commerce Reports, 1915, No. 281, p. 857. Note quoted rates on kauri gum.

THE EARLY REGULATION OF PUBLIC SERVICE CORPORATIONS

The regulation of public service corporations has assumed such importance in recent years that there is general disposition to consider it a modern method of securing justice between the public and corporations. A study of early public utility companies and the laws dealing with them warrants no such conclusion. The service of these companies to the public was recognized from the first and was given as one reason for granting charters. As early as 1784 Massachusetts lawmakers incorporated the proprietors of a bridge company because the bridge would be of "great public utility."¹ That the companies were looked upon to some extent as public benefactors, did not, however, grant them immunity from regulatory provisions. The early companies were, of course, comparatively simple, consisting largely of turnpike, canal, bridge, and ferry companies. Yet in the regulatory provisions concerning them are found the germs, if not the actual statements, of practically all our present methods of regulation.

The present machinery for regulating public utility companies is of course more extensive and adequate than what existed in the latter part of the eighteenth and the early part of the nineteenth centuries. The work is now usually carried on through public utility commissions. These began to be formed about the middle of the nineteenth century, but did not assume their present activities until a quarter of a century later. Only recently have state public utility commissions been formed, New York and Wisconsin almost simultaneously taking the lead. The movement has spread so rapidly that a majority of the states now have such commissions. The commissioners generally receive power from the legislature, which is either that of general supervision or an enumeration of special and particular powers. Provision is often made for judicial review. Salaries are paid by the political unit which the commission represents.

A commission of some form was generally used in supervising the early public utility corporations. Position on the commission was secured by appointment, but not all members were appointed by the same authority. Some commissions were temporary and others were permanent, while a limit was often placed upon the amount of time which could be allowed to the commission for its

¹ Laws and Resolves of Massachusetts, 1784, ch. 53.

services. Instead of being recompensed directly from the public funds, as at present, the earlier commissioners were paid directly by the corporation.

In 1803 a New York law² incorporated a turnpike company and provided that the governor should appoint three commissioners to examine the road from time to time. Each commissioner was to be paid three dollars a day by the corporation but the inspection was not to exceed two days a month. An 1804 turnpike law³ provided for inspection on complaint. If the company or complainant was dissatisfied with the finding of one commissioner, appeal could be made to the whole board, whose decision was final. If unappealed, and the complaint was well founded, the corporation was to pay the inspector three dollars a day as well as three dollars to the complainant; if not well founded, the complainant was to pay the inspector. If appealed, and the complaint was still considered well founded, the corporation was to pay the complainant ten dollars. In 1806 a law⁴ provided that if the complaint was unfounded the corporation was to collect, at law, from the complainant the amount paid to the inspectors. In 1806⁵ provision was made for the appointment of appraisers and inspectors by the county judge. For the first service the judge was to receive one dollar from the corporation, likewise for the second unless the complaints investigated were unfounded, in which case the complainant was to pay the one dollar. Many of these provisions were incorporated in a general law in 1807 which provided for the appointment of commissioners to lay out the road⁶ and others to inspect it, both of which were to be paid specified amounts by the corporation.

Other states besides New York handled the problem in a similar way. In the Laws and Resolves of Massachusetts for 1804⁷ there is an act defining the general powers of turnpike companies. Provision was made for the legislature to appoint a committee to view the route proposed by the petitioners for a road. When a grant was made for a road, the court of general sessions of the peace within the county where the road was located was to appoint five disinterested freeholders who were to have the same powers

² New York Statutes, 1803, ch. 50.

³ *Ibid.*, 1804, ch. 90.

⁴ *Ibid.*, 1806, ch. 170.

⁵ *Ibid.*, 1806, ch. 50.

⁶ *Ibid.*, 1807, ch. 38.

⁷ Laws and Resolves of Massachusetts, 1804, ch. 125.

as committees appointed for laying out public highways. All the expenses of the committeemen were to be borne by the corporation. In 1806⁸ North Carolina gave the county court powers to regulate bridge companies within certain limits. Pennsylvania in 1783⁹ permitted ferries to be established subject to such regulation as the legislature considered best. By a law of Vermont, 1808,¹⁰ the judges of the supreme court were to direct the examination of a bridge company and could reduce tolls. In 1820¹¹ she gave the village selectmen broad powers in regulating a ferry. In 1817¹² Virginia conferred regulatory powers upon the board of public works but provided that the legislature might confer the same powers upon any other body.

These examples show that the principle of regulation was recognized from the beginning. In some cases new machinery was created while in others use was made of bodies already existing, such as legislature, courts, and selectmen. In taking note of some of the more specific forms which this regulation assumed, it will be convenient to classify present regulation into provisions for supervising—(1) franchises and officers, (2) valuation and rates, (3) security issues, (4) service and property, (5) accounts and reports—and then to examine these, noticing briefly the scope covered by each at present but more especially the early regulatory provisions that would fall in each class.

Franchises and Officers

One of the first duties which was placed on the public utility commission after it was formed was to select the location for railroads in accordance with the public utility. The regulation of granting and using franchises is often extended to the commission. Laws often contain regulatory provisions, such as prohibiting the capitalization of franchises, while provision is sometimes made for their purchase and termination. Penalties are frequently prescribed against officers for failure to make reports, for failure to produce books, for refusal to obey subpoenas and for granting concessions to commissioners.

In view of the importance now attached to the subject of the

⁸ Laws of North Carolina, 1806, ch. 14.

⁹ Laws of Pennsylvania, 1783, ch. 1042.

¹⁰ Laws of Vermont, 1808, ch. 63.

¹¹ *Ibid.*, 1820, ch. 113.

¹² Laws of Virginia, 1817, ch. 38.

length and termination of franchises, it is interesting to note the early provisions of this nature, their wide extent, and the number of ways in which franchises could be terminated. Massachusetts, in the general turnpike law of 1804,¹³ stipulated that a company could be dissolved if it appeared to the satisfaction of the legislature that the income had compensated the company for money expended together with 12 per cent interest. The property, in case of dissolution, was vested in the commonwealth and at the disposal of the legislature. Connecticut, in 1806,¹⁴ declared that upon neglect to make repairs the charter of the company was to be declared void. By a law of Maryland, 1801,¹⁵ when a road had been remunerated for its capital stock, together with 15 per cent on it and for all damages it had met, tolls were to cease forever. In 1803¹⁶ the legislature provided that all above 15 per cent received by a bridge company should be kept as a sinking fund to purchase the stock. A law the next year¹⁷ provided that if the profits of a turnpike company were more than 10 per cent the court was to receive the surplus and use it in purchasing the road. The general assembly could at any time after the completion of the road, one year's notice having been given to the company, pay the cost of the road with interest at 10 per cent whereupon the road would pass under the control of the legislature. In 1820¹⁸ New Jersey incorporated a canal company which could be taken over at the end of 50 years by paying the sum expended together with 12 per cent interest.

The earlier provisions in Massachusetts were less considerate of the companies. The law of 1784¹⁹ simply provided that at the end of forty years the bridge to be erected by the company was to revert to the state. Nothing was stated about a return or price; nor was there any such statement in the law of 1787²⁰ permitting the erection of a bridge which was to revert to the state in good repair at the end of seventy years. The road company incorporated by the state in 1796²¹ could be dissolved by the general court

¹³ Laws and Resolves of Massachusetts, 1804, ch. 125.

¹⁴ Acts and Laws of Connecticut, 1806, p. 717.

¹⁵ Laws of Maryland, 1801, ch. 23.

¹⁶ *Ibid.*, 1803, ch. 103.

¹⁷ *Ibid.*, 1804, ch. 51.

¹⁸ Laws of New Jersey, 1820, p. 55.

¹⁹ Laws and Resolves of Massachusetts, 1784, ch. 53.

²⁰ *Ibid.*, 1787, ch. 27.

²¹ *Ibid.*, 1796, ch. 5.

when it was satisfied that the tolls had paid expenses together with 12 per cent interest. Pennsylvania granted both perpetual and terminable franchises. In 1787²² a bridge company was formed, but at any time after the erection of the bridge, the legislature, if it considered a free bridge desirable, was to appoint three commissioners, who, with three appointed by the proprietors of the bridge, were to decide upon the amount to be given in payment. In 1793²³ an act vested the property of a bridge in the company or their heirs forever. A turnpike, granted in 1796,²⁴ could be purchased after twenty-five years for a sum determined by ten commissioners, five to be appointed by the legislature and five by the company. All profits above 15 per cent from the bridge established in 1798²⁵ were to be used as a sinking fund to redeem the bridge. When the toll from the road chartered by Vermont in 1799²⁶ amounted to the cost of the road with an annual interest of 12 per cent, the supreme court might dissolve the corporation and place the property at the disposal of the legislature.

Similar provisions are found in charters granted in the first quarter of the nineteenth century. Vermont, in 1808,²⁷ chartered a turnpike company but provided that when receipts had repaid expenditure with 8 per cent interest the corporation was to be dissolved and the property vested in the state. Virginia, however, granted perpetual franchises. The general turnpike law of 1817²⁸ provided that, in consideration of the expenses of the proprietors, roads with all tolls and profits were to be vested in the proprietors forever in proportion to their shares. This state even went further and declared the shares free from public tax. Provision was made, however, that if a road were out of repair for eighteen months the interest of the company in the road and tolls was to be forfeited forever. South Carolina, also, in one instance at least, because of the great cost to the proprietor, vested a road in him and his posterity forever.²⁹

Early provisions regarding franchises are not confined to the eastern states but are also found in laws of some of the middle

²² Laws of Pennsylvania, 1787, ch. 1302.

²³ *Ibid.*, 1793, ch. 1684.

²⁴ *Ibid.*, 1796, ch. 1878.

²⁵ *Ibid.*, 1798, ch. 1963.

²⁶ Laws of Vermont, 1799, p. 38.

²⁷ *Ibid.*, 1808, ch. 117.

²⁸ Laws of Virginia, 1817, ch. 38.

²⁹ Laws of South Carolina, 1810, p. 37.

western states. Illinois territory, in 1818,³⁰ chartered a navigation company. In consideration of the expense, the works and the profits from the enterprise were vested in the company for thirty years, but at the end of that time all title was to cease. During this period no tax was to be collected from the company. In 1812³¹ Ohio gave a charter to a bridge company for ninety-nine years. If higher tolls were charged, however, than those set forth in the schedule, the county was to have all rights of proprietorship. In 1817³² a turnpike company was incorporated, and it was provided that at any time the state or counties had a right to purchase the road for its cost plus 12 per cent. A law of 1819³³ authorizing a bridge company gave the county commissioners power to purchase the bridge, 6 per cent interest to be allowed.³⁴

The early provisions referring to officers and employees were not many; yet we find the possibility of such regulation recognized in a few instances. Maryland, in 1804,³⁵ provided that the court could require road repairs and if these were not made in proper time the president of the road was to be fined. Massachusetts, in 1780,³⁶ provided for a suitable person to collect toll who must be approved by the court of general sessions. He was to be fined for collecting more than specified toll. Delaware, by a law of 1815,³⁷ provided that a toll collector who demanded more than scheduled rates should forfeit twenty-five dollars. Maryland in 1801³⁸ made the penalty for a similar offense fifty dollars.

³⁰ Laws of Illinois Territory, 1817-1818, p. 4.

³¹ Ohio Laws, 1812, ch. 22.

³² *Ibid.*, 1817, ch. 13.

³³ *Ibid.*, 1819, ch. 13.

³⁴ A number of instances can be found where the rights of these companies reverted to the political unit. A careful study of the documents of different states and counties would doubtless show a large number. It seems the proprietors were not always willing to give up their rights. An example of this is the Charles River Bridge and the Warren Bridge at Boston. Here the proprietors resorted to litigation. A number of House Documents refer to this controversy, *e.g.*, No. 4, 1826 and No. 82, 1827. The laws of the state, 1828, p. 510 and p. 851 also refer to the controversy. The resolves of 1824, ch. 64 authorizes the ascertainment of the reversionary value of some bridges. A number of years later some states changed the provisions for purchasing roads. Ohio did this in 1878. (Ohio Laws, vol. 75, p. 1150.)

³⁵ Laws of Maryland, 1804, ch. 51.

³⁶ Laws and Resolves of Massachusetts, 1780, ch. 7.

³⁷ Laws of Delaware, 1815, ch. 45.

³⁸ Laws of Maryland, 1801, ch. 23.

Valuation and Rate Making

Valuation and rate making occupy important places in present regulation problems. Reasonable freight rates are required, with but little light on what "reasonable" means. "Value of service," "what the traffic will bear," and "cost of service" have been used as bases for rate fixation, the odds at present favoring the latter. Commissions are given power to deal with a large number of problems which arise concerning rates, while legislatures prescribe penalties for a long list of offenses. In allowing certain returns the value of the utility must be determined and as yet no general method has proved entirely satisfactory.

Inspection of the early laws reveals that the subject of valuation and rate making occupied a scarcely less important place then than at present. Most of the rates were fixed by schedule while they were often to be changed to allow a certain percentage return on the value of the property. Massachusetts as early as 1780³⁹ stipulated certain rates of toll for a bridge. In 1784⁴⁰ a bridge company was organized with a schedule of tolls to continue in force for forty years. Two bridge companies were incorporated in 1794.⁴¹ In the case of one the general court could change the rate of toll after twenty years; in case of the other after twenty-five years. In 1804⁴² she established a schedule of tolls for all turnpike companies.

Maryland, in 1804,⁴³ made provision that if at the end of two years the average profits had not been 10 per cent the tolls were to be increased until this return should be realized. By a law of 1807⁴⁴ the New Hampshire court was to so regulate tolls that net profits would be between 6 and 9 per cent. New Jersey, when incorporating a canal company in 1820,⁴⁵ required one fifteenth of all profits to be paid to the state whenever the return was more than 15 per cent on the capital. Pennsylvania laws of 1787, 1791, and 1792⁴⁶ incorporated a bridge company and two canal companies. Schedules of tolls were given which were to be revised if the return was more or less than a certain per cent on the capital. In

³⁹ Laws and Resolves of Massachusetts, 1780, ch. 7.

⁴⁰ *Ibid.*, 1784, ch. 53.

⁴¹ *Ibid.*, 1794, ch. 32 and 33.

⁴² *Ibid.*, 1804, ch. 125.

⁴³ Laws of Maryland, 1804, ch. 51.

⁴⁴ Laws of New Hampshire, 1807, p. 8.

⁴⁵ Laws of New Jersey, 1820, p. 55.

⁴⁶ Laws of Pennsylvania, 1787, ch. 1302; 1791, ch. 1577; 1792, ch. 1636.

1810, 1812, and 1819⁴⁷ Ohio incorporated bridge companies. A schedule of tolls was given in each case. In the first case any legislature could regulate the tolls after 1840; in the second, after fifteen years and once every five years thereafter; in the last case any legislature after 1840 could regulate the tolls. A Virginia law of 1808⁴⁸ allowed tolls to bring 10 per cent on the capital, while a law of 1817⁴⁹ permitted higher tolls during the first years of a company's existence. After fifty-one years, however, tolls could only vary so as to realize a return of from 6 to 10 per cent on capital.

Securities

The supervision of security issues is looked upon as one of the newer forms of regulation and the laws of some states are exacting in this respect. In some cases the mortgaging of public utility property is regulated; in others the purchasing and holding of stocks and bonds in other companies is supervised. Often consolidations can be formed only under the direction of a commission, penalties being prescribed for issuing stocks and bonds other than with its consent.

The security aspect of regulation did not assume an important place in early legislation. Trusts and combinations were unknown and there was no interdependence among companies. Yet even in the early laws are found germs of the policy that the state has a right to supervise a company's securities. Connecticut, in a general turnpike law of 1803,⁵⁰ stipulated that all expenses except for necessary and ordinary repairs were to be met by an increased capital stock. Even the three dollars a day paid to commissioners was to be raised in this way. By a law of 1805,⁵¹ however, no deficiency of interest could be charged to capital. North Carolina incorporated a bridge company in 1812⁵² and prohibited any person from subscribing to more than twenty shares within thirty years after the books were opened. Pennsylvania in 1792⁵³ forbade the increase of capital stock unless the authorized capital did not complete the canal chartered or unless it was injured through casualty.

⁴⁷ Laws of Ohio, 1810, ch. 65; 1812, ch. 22; 1819, ch. 67.

⁴⁸ Laws of Virginia, 1808, ch. 27.

⁴⁹ *Ibid.*, 1817, ch. 38.

⁵⁰ Acts and Laws of Connecticut, 1803, p. 636.

⁵¹ *Ibid.*, 1805, p. 691.

⁵² Laws of North Carolina, 1812, ch. 26.

⁵³ Laws of Pennsylvania, 1792, ch. 1636.

Service and Property

At present we are accustomed to a variety of regulations affecting the services and property of public utility companies. Some laws require particular appliances and equipment; others give commissions power to make such requirements. Penalties are prescribed for failure to carry out the various kinds of service requirements. The sale and lease of property is often supervised while damages to other property caused by a public utility company are assessed and awarded by commissioners. Additions, extensions, repairs, etc., are often required to be made to the existing plant.

Some provision concerning service to be rendered is generally found in the early laws which chartered turnpike and bridge companies. The right to collect tolls was frequently based upon the maintenance of a required standard of service. As early as 1796⁵⁴ Massachusetts placed a fine upon companies for unreasonable delay of travelers, while in 1802⁵⁵ she made the companies liable for all damages resulting from defects in the road. The general turnpike law of 1804⁵⁶ provided that a corporation should be fined if any person in its employ should collect more toll than allowed by law. If a road was not kept in good condition the county court could order the gates to be thrown open and no toll could be collected until a counter order was given. In 1797⁵⁷ a Connecticut law required the county court to inquire into any complaint as to the condition of the road. If the complaints were well founded tolls were to cease until a further order from the court. In the general law of 1803 the commissioners were required to carefully inspect the roads annually or more often if "they thought the public good required it." If they were not found in good repair the commissioners could order the toll gates thrown open until acceptable repairs were made. North Carolina, Rhode Island, and Ohio at later dates had similar provisions. North Carolina, in 1811,⁵⁸ made the proprietor liable for damages if he failed to keep the road in repair. No person was to be detained at any gate longer than fifteen minutes after he had tendered toll. Rhode Island in 1812⁵⁹ gave the justices of the county court power, upon com-

⁵⁴ Laws and Resolves of Massachusetts, 1796, ch. 5.

⁵⁵ *Ibid.*, 1802, ch. 34.

⁵⁶ *Ibid.*, 1804, ch. 125.

⁵⁷ Acts and Laws of Connecticut, 1797, p. 473.

⁵⁸ Laws of North Carolina, 1811, ch. 48.

⁵⁹ Rhode Island Public Laws, 1812, p. 155.

plaint which they thought well founded, to order the gates opened until proper repairs were made. Ohio chartered a bridge in 1812⁶⁰ stipulating that for every offense of not keeping it in repair the company was to forfeit five dollars.

Accounts and Reports

Regulation of accounting methods and securing reports of different kinds occupies an important place in the present relation of the public to utility companies. The Interstate Commerce Commission requires accounts and reports from the railroads. Some states make the same requirements for companies within the state; others prescribe systems of their own. Provisions are generally made for examining and auditing accounts under direction of commissioners, and specific forms are often required. Free access to a company's books is generally required, penalties being inflicted for mutilation of books or failure to keep them in the prescribed manner.

In the early laws no less emphasis was placed upon the right of the public officers to supervise accounts and demand reports. These provisions, as is true of most of the other regulatory provisions, were usually first found in laws dealing with specific companies. When a general law was enacted they were incorporated in it. That these specific provisions were made general is evidence that they accomplished the purpose for which they were intended. Here again Massachusetts was early in requiring such regulation. The act of 1780,⁶¹ which chartered a bridge company, required the proprietor to keep an account of the tolls received and exhibit this under oath to the court. A law of 1796⁶² required the books of the turnpike company chartered by it to be open at all times to inspection and examination by a committee appointed by the general court. The books were likewise to be open to the inspection of the governor at any time. A true account of incomes and dividends arising from tolls together with a statement of necessary disbursements was to be made annually to the governor and council. Practically the same provisions were incorporated in the general turnpike act of 1804⁶³ and in addition a statement of the cost of the road was required. Connecticut was even more specific, for in

⁶⁰ Ohio Laws, 1812, ch. 22.

⁶¹ Laws and Resolves of Massachusetts, 1780, ch. 7.

⁶² *Ibid.*, 1796, ch. 125.

⁶³ *Ibid.*, 1804, ch. 125.

1805⁶⁴ a law was passed entitled "An act to establish a uniform mode of stating and preserving accounts of turnpike companies." Commissioners were to be appointed to inspect the companies and to give the accounts to the state treasurer in such form as he prescribed and on the uniform blanks which he was to have printed. The amount of capital stock was to be stated in one account while the statement of repairs, expenses, and tolls was to be in another.

Other states were no less reticent in requiring similar provisions. New York in her general turnpike law, 1807,⁶⁵ required the corporation to file an accurate map of the road with the clerk of the county through which the road passed. Maryland, in incorporating a road in 1801,⁶⁶ required an annual statement of receipts and expenditures. For each neglect to make the return the company was to forfeit one thousand dollars. Pennsylvania chartered a canal company in 1791⁶⁷ which, at the end of every third year, was to lay before the general assembly an abstract of accounts showing capital expenditure, income and profits. The canal company chartered in 1798⁶⁸ was to give an abstract of accounts at the end of every six years for the five preceding years. Vermont chartered a bridge company in 1799.⁶⁹ At the end of twenty years the judges of the supreme court were to examine into the accounts of the company through an entirely disinterested person whom they were to appoint. He was to be sworn to the faithful discharge of his trust, to be empowered to call before him and examine under oath any person he desired, and was to make out what he considered a fair statement of the cost of erecting the bridge as well as the proceeds arising from tolls. Another company chartered the same year⁷⁰ was ordered to lay all accounts before the legislature at the end of every fifteen years. A bridge company formed in 1808⁷¹ was to be examined by the court representatives at the end of eight years and at the end of every five years thereafter.

Some years later other states enacted laws of a similar nature. North Carolina⁷² chartered a canal company in 1811 and at the

⁶⁴ Acts and Laws of Connecticut, 1805, p. 691.

⁶⁵ New York Statutes, 1807, ch. 38.

⁶⁶ Laws of Maryland, 1801, ch. 23.

⁶⁷ Laws of Pennsylvania, 1791, ch. 1577.

⁶⁸ *Ibid.*, 1798, ch. 1963.

⁶⁹ Laws of Vermont, 1799, p. 59.

⁷⁰ *Ibid.*, 1799, p. 38.

⁷¹ *Ibid.*, 1808, ch. 63.

⁷² Laws of North Carolina, 1811, ch. 25.

end of every twenty-five years she required a sworn statement of tolls for the preceding years. Another company chartered the same year⁷³ was to make a sworn annual statement to the superior court of all receipts and expenditures. Delaware required a road company chartered in 1815⁷⁴ to give an abstract of accounts every third year for ten years; after that an abstract at the end of every ten years for the preceding three years. Virginia required the turnpike company incorporated in 1817⁷⁵ to make a report at the end of the first year of the amount of stock expended, expenses, and toll received, while a similar report was required at the end of every three years. The board of public works, to which the report was to be made, was to prescribe the form of the report and determine how it was to be verified. Ohio required the turnpike company chartered in 1817⁷⁶ to keep account of expenses and receipts. Books must be always open to the inspection of the county commissioners or an agent appointed by the legislature. A refusal to exhibit books forfeited all rights conferred by the act. An act in 1819⁷⁷ required a bridge company to keep and file expenses with the county commissioners. When New Jersey incorporated a canal company in 1820⁷⁸ she demanded at the end of twenty years and at the end of every ten years thereafter an account of profits and expenditures to be given to the legislature. Books, papers, and transactions after twenty-one years were at all times to be open to the inspection of the state treasurer or any one appointed by the legislature.

From this review of the legislation by which public utility companies were formed before 1820 it can be seen that regulation existed at even this early date. In fact, regulation and the public utilities have grown up hand in hand. At first the regulation was simple, but the operations of the companies were simple also. As the companies became more extensive, regulation, even in these early years, branched out into new fields, and was of such character that it naturally conforms to a classification of present-day methods. Only in the agency of the regulation and in the method of remuneration has there been marked change. Instead of a special

⁷³ *Ibid.*, 1811, ch. 48.

⁷⁴ Laws of Delaware, 1815, ch. 45.

⁷⁵ Laws of Virginia, 1817, ch. 38.

⁷⁶ Ohio Laws, 1817, ch. 13.

⁷⁷ *Ibid.*, 1819, ch. 67.

⁷⁸ Laws of New Jersey, 1820, p. 55.

commission to look after each corporation, a state commission now supervises all the public utility companies in a state. Remuneration of commissioners instead of coming directly from the corporation, is now paid from public funds. This is generally more than equalled, however, through greater taxation, so in the end the results are the same. Regulation, then, cannot properly be called a modern method of handling the public service corporation, for it is simply the extension of a system which began with this class of corporation and the application of it to meet the different phases of the problems arising out of the peculiar relationship of public utilities to the state.

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THE PRICE PROBLEM IN THE LUMBER INDUSTRY

Many of the most important issues with respect to the prices of the basic raw materials of industry and to the wise control of natural resources generally are exemplified in the lumber industry. These are live subjects. Competition in many American industries has been virtually suspended under the war conditions. To the problem of prices is therefore added the problem of adequate control. Professor Stephens' interesting article in the *AMERICAN ECONOMIC REVIEW*¹ is timely. So pointed is the analysis of price determinants that one wishes that the more complete facts concerning the price situation which the writer has there depicted might have been in his possession.

So complex is the lumber price mechanism that it defies brevity in its analysis. The sins of over-capitalization, the perils of borrowed capital sunk in a speculative enterprise, the consequences of an exceptional degree of decentralization are all to be considered. Influences peculiar to natural resources as a class are present; still others peculiar to standing timber alone. With them all are the general influences affecting the prices of all commodities in the same direction and tending, other things being constant, in the long run, to affect them equally.

The isolation of the specific effects of specific influences, difficult at best under the most simple conditions, is many times more difficult in the analysis of lumber prices. To this end Professor Stephens' article is illuminating. It is essentially a review of the present writer's book on *The Organization of the Lumber Industry*.² In this book attention is directed to the price problems fundamental in the consideration of public policy with respect to standing timber, and a convenient method of price analysis is outlined. But Professor Stephens' flattering estimate of it does not perhaps indicate adequately that reasonably close approximations are the best that may be expected. In abstracting from the total movement of lumber prices that proportion which has been due either to influences peculiar to lumber or to general influences operative upon lumber prices to an unusual degree, no modest assumption with respect to *facts* is required. The assumption that the total movement of lumber prices over a given period, in so far as it has been, in respect both to direction and relative amount,

¹ G. A. Stephens, "Determinants of Lumber Prices," *THE AMERICAN ECONOMIC REVIEW*, vol. VII, no. 2 (June, 1917), pp. 289-305.

² Chicago: American Lumberman. 1916. Pp. x, 153.

the same as the movement of general prices, has been due to *general* influences affecting all commodity prices and not to specific influences affecting lumber only, is proper food for the analysis to which Professor Stephens has subjected it. This assumption has the merit of a convenient working basis as closely corresponding to the facts as available information will allow. Although Professor Stephens in his review has not distinguished between a working assumption and a statement of fact, the present writer and the student of the lumber industry may be grateful to him for the added proof his careful analysis gives of the essential correctness of the basic assumption of the book with respect to general price influences in their relation to lumber prices. This is the more for the reason that the same method and the same assumption may be used and is now being used by public agencies in the study of other natural resources.

The recent article is illuminating with respect to many important aspects of lumber price fixation. But many significant facts appear to have been overlooked and others apparently misconstrued. The present writer, although desiring to promote a complete and accurate statement of an instructive price situation, is nevertheless not disposed to enter a controversial field where, in the absence of facts, opinion is balanced against opinion. The brief space available for this purpose admits of but the most meager exposition. Many matters must therefore remain untouched.

I

The lumber manufacturing industry has long had the attention and study of public agencies. The chief public interest attaches to it as the virtual administrator of the nation's resources of standing timber. From unhealthy competitive conditions, largely the result of defective organization and unwise financing of investments, the industry first sought self-relief through trade agreements, formal or informal, and under varying guise. But this search was comparatively fruitless and was discouraged from within and repressed from without. Since 1907, with the exception of the past few months when under war conditions a shortage of labor and of transportation facilities has caused a virtual suspension of competition in the sale of lumber in many regions of the United States,³ the lumber industry has shared but little in the

³ The production at the mills has apparently not declined substantially if at all. But a considerable proportion of the output is not reaching the market

general increase in prices. The highest prices during this ten-year period were in the second quarter of 1907, the first quarter of 1913, and the first quarter of 1916. The lowest prices occurred during the second quarter of 1908 and the second quarter of 1915.

A comparison of these extremes of price in percentages of a base price of 100, which is the average price for the first three quarters of 1907, is shown in the following table.⁴ The species included constitute nearly 90 per cent of the annual cut of softwood lumber. Hardwoods are not included. They are relatively much less important and the prices of them present in large part a separate problem.

RELATIVE PRICES OF LUMBER BETWEEN 1907 AND 1916
Basis: F. O. B. Mill.

Species	Year	1907	1908	1913	1915	1916
	Quarter	2	2	1	2	1
Southern Yellow Pine		103.4	58.0	107.3	78.2	108.9
North Carolina Pine		102.3	88.1	127.3	95.9	115.8
Douglas Fir		101.3	77.3	89.7	58.6	86.8
Northern Pine		100.9	94.6	104.9	99.9	103.4
Hemlock		102.1	77.2	104.1	89.6	101.2
Cypress		100.4	89.2	97.7	91.2	(²)
Western White Pine		(¹)	(¹)	107.3	102.8	110.7
Western Yellow Pine		(¹)	(¹)	100.8	85.7	96.0

¹ Prices not available for period prior to second quarter of 1909. For this quarter the relative price of Douglas fir is used for both species of western pine, namely, 81.6.

² Prices not available.

During the same period general commodity prices,⁵ on a base similarly computed, moved as follows:

	1907	1908	1913	1915	1916
General prices	100.	97.8	106.7	107.5	132.8

where it may come into touch with, and be balanced against, the demand. The present prices are therefore in a measure fictitious. When normal transportation conditions reassert themselves this situation will doubtless disappear.

⁴ These relative prices are based on a representative average for each species of prices of actual sales of lumber by identical mills throughout the period or by mills in substantially similar situation in the same region.

⁵ Adapted from Index of Relative Prices of Bureau of Labor Statistics.

Lumber prices, it is apparent, have greatly lagged behind general prices during this period. At the same time the proportion of the total output of lumber which has been cut in each lumbering region has remained practically constant, *i.e.*, about 24 per cent in the Pacific States and Montana and Idaho, including chiefly Douglas fir and the western pines; about 45 per cent in the Southern States, including chiefly southern yellow pine, North Carolina pine and cypress; about 15 per cent in the Lake States and the Eastern States, including chiefly northern pine and hemlock. The remainder of the output is almost exclusively hardwood in the central hardwood region. It is obvious, therefore, that the most important facts with respect to lumber prices concern the softwoods of the South and the West. These two groups of softwoods, moreover, constitute more than two-thirds of the total supply of merchantable standing timber of all species in the United States.

To complete the preliminary picture of the lumber price situation it is necessary to compare the facts above shown with those of the period preceding 1907. General commodity prices in terms of gold dollars in 1900 were approximately the same as they had been in 1860. But during the intervening period the average prices of lumber, at the mill, increased more than 150 per cent. Lumber was becoming a much more important article of interstate commerce and the markets secured their lumber supplies from mills increasingly distant. Between 1890 and 1907 general prices increased 14.6 per cent and lumber prices 94 per cent. The outstanding facts, therefore, of the period prior to 1907^a are: (1) The great increase in lumber prices as compared to general prices, and (2) the constantly increasing proportion of the lumber output which was manufactured in the regions most distant from the chief consuming centers. Contrasted with these are the analogous facts for the period since 1907, namely: (1) The substantial decline in lumber prices as compared to general prices, and (2) the almost uniform relation maintained between the quantities of lumber produced in the different regions.

^a The year 1907 marks the point of maximum total production of lumber in the history of the lumber industry in the United States, *i.e.*, 46 billion feet as against approximately 440 billion feet in 1916. Increasing substitution of other commodities for lumber, replacing within the last 10 years the equivalent for nearly 8 billion feet of lumber, is one of the main causes underlying the recent decline in the demand for lumber. But on the other hand the high prices for lumber prevailing before 1907 were probably chiefly responsible for the increased substitution.

II

The panic of 1907 was followed by a severe reaction in lumber prices, as has been shown in the table above. To a substantial degree the ordinary demand for softwood lumber is a joint demand. The activity of this demand depends in large measure upon industrial activity generally. As Professor J. M. Clark⁷ has recently pointed out, the changes in the demand for finished products are reflected back to more extreme and more sudden variations in the demand for the "means of production" of such finished products. The case of structural lumber is an illustration in point. The great temporary fluctuations in lumber prices, such as have been shown, are not therefore without substantial explanation.

In view of the following facts, the statement by Professor Stephens that "The demand for lumber is unusually elastic, quickly responding to changes in both price and industrial conditions"⁸ requires consideration from an angle different from that from which he has approached it. The joint character of a great part of the demand for lumber has apparently been overlooked. To say that the demand for lumber is quickly responsive to changes in industrial conditions means that the demand for lumber responds quickly to changes in the demand for those commodities to the production of which the lumber is only a single intermediate instrumentality. But such responsiveness is by no means indicative of an elastic demand for lumber. When, for example, factory products are in great demand, structural lumber is likewise in demand for factories and repairs. And this is true in large measure irrespective of the price of the lumber. To the extent to which the demand for lumber is a joint demand it is not responsive to changes in price and as compared to the demand for commodities generally it is inelastic, not elastic.

This fact is recognized throughout the lumber trade and is one of the greatest causes of perplexity to the lumber manufacturer or dealer in his effort to maintain stable prices with a reasonably uniform volume of sales. The present writer has been repeatedly told by manufacturers, especially by dealers, and, with respect to certain important classes of trade, "I cannot sell a stick more by reducing my prices and I sell just as much by keeping my prices up." Such expression, although doubtless an exaggeration, is

⁷ Business Acceleration and the Law of Demand: A Technical Factor in Economic Cycles, *Journal of Political Economy*, March, 1917.

⁸ Stephens, *loc. cit.*, p. 304.

significant of the basic fact in the experience of the industry. Were the demand for lumber elastic, one of the most troublesome faults in the organization of lumber distribution could be corrected.

But the inelasticity of the demand for lumber is not confined to the field of joint demand (although the line of demarcation of that field is difficult to draw). Many of the most prominent southern lumbermen have asserted to the present writer that if they could only reduce by 2 per cent the average yearly cut of southern yellow pine lumber, year in and year out, they could prevent the extreme fluctuations in prices such as those depicted in the above table. This, if true, means that decreases as great as 30 per cent in the average price could have been counteracted by a 2 per cent decrease in stocks. Numerous facts tend to confirm this contention in substance, although the proportionate decrease in stocks required may perhaps have been underestimated by overzealous advocates of a particular remedy for the disease of the industry. But during 1915, in a single marketing territory in the Southwest, an increase accumulated in yard stocks of but little more than 1 per cent was accompanied by a decline of more than 10 per cent in price. Similar instances have been noted. They are not conclusive of inelasticity of demand. But they are confirmatory evidence of it.

Between the second quarter of 1907 and the second quarter of 1908 softwood lumber prices generally fell almost 40 per cent. General prices fell less than one-half as much. The production of lumber likewise declined during the period more than 10 per cent. But despite the great proportionate curtailment of lumber output of the entire country a recession in price of 45 per cent in the case of southern yellow pine and of nearly 30 per cent in the case of Douglas fir was necessary to enable the market to absorb the offered stocks. Such characteristics are not those of a commodity for which the demand is highly elastic. It is to be noted, moreover, that the heaviest buying recorded in the lumber industry occurred from 1905 to 1907, during which the prices of softwood structural lumber increased nearly 50 per cent on an f. o. b. mill basis. During the same period there was almost unprecedented industrial activity generally.

III

But another important factor is to be noted in relation to the demand for lumber, namely, the changes in the national habit of

inordinate lumber consumption. This may be illustrated by the following comparison of the per capita utilization of lumber in representative states and foreign countries in feet, board measure:

Montana (1915)	1,234	Germany (1913)	150
Oregon (1915)	714	England (1914)	102
Pennsylvania (1915)	293	France (1914)	90
New York (1915)	206	Canada (1909)	468
United States (1915)	375	United States (1909)	485

This indicates, with respect to the United States a relatively heavy demand in the early stages of development (as exemplified by Montana) for lumber largely, it may be assumed, for structural purposes or for other uses requiring chiefly rough lumber. With the filling up of the "silent places" of the West and with the more gradual subsequent agricultural and industrial development (as exemplified in Pennsylvania or New York) the relative demand for lumber for the uses which formerly were the most important has much declined.

An increasing proportion of the new demand for lumber now being developed by the organized trade extension campaigns of lumber manufacturers is for stock requiring a greater average degree of refinement and a greater specialization of manufacture. Specialties are in growing demand. It is possible that with respect to these the demand is more elastic, a decline in price stimulating a greater than proportionate increase in buying. But this feature characterizes only a small part of the total lumber situation and is confined in large part to hardwoods. The great bulk of softwood structural lumber still encounters a relatively inelastic demand. A slight relative overproduction regularly has resulted in a great decline in price. This fundamental characteristic of lumber prices is one of the most decisive factors to be considered in the determination of a public policy whereby a stable condition of the lumber industry may be maintained.

IV

As bearing again upon the principles of lumber price fixation by the ordinary forces of the market, the following statement on cost and prices calls for consideration:

So preponderant, indeed [about 80 per cent], is the wage factor in lumber manufacturing, that were other factors in all industries to remain stationary and labor costs to increase in like percentages, total costs would increase relatively more in lumber manufacturing than in

the average of other industries, resulting, other things equal, in relatively higher prices.⁹

The actual proportion of the wages item in manufacturing cost is much less than is often asserted by lumbermen. Usually inadequate depreciation or none at all has been charged to cost in the manufacture of lumber. Frequently general expenses are not added, and the "manufacturing cost" spoken of often includes only the *specific costs* of the logging, milling and yarding operations. But the "overhead" in lumber manufacture is relatively large, and in the use of powerful labor-replacing machinery the actual "depreciation" is heavy.

The labor element, although preponderant, is generally much less than 80 per cent of the total cost. For example, the proportion of wages in total cost of operation only (*i.e.*, including no charge for the standing timber used), from stump to mill yard, for several representative mills in important regions, was as follows:

Southern yellow pine region (1914)—for 62 mills, 56 per cent.

Douglas fir region, Pacific Northwest (1913)—for 8 mills, 51 per cent.

Inland Empire—Idaho, Eastern Washington and Oregon (1914)—for 22 mills, 50 per cent.

California redwood region (1914)—for 11 mills, 47 per cent.

The lumber industry is the largest employer of labor in the United States, but the relative importance of the wages element in costs has been often exaggerated. More important, however, in the excerpt quoted above is the statement that "were other factors in all industries to remain stationary and labor costs to increase in like percentages," this situation would result in relatively higher prices for lumber. Such a situation has frequently existed in parts in the lumber industry without this result. Sharp competition between different manufacturing regions frequently, if not usually, in normal times has prevented any corresponding increase in lumber prices to compensate for the increase in labor cost. Allowing for differences in the efficiency of the average wage-earner in the lumber industry, the increase in labor cost since 1890 has been not less than 60 per cent in the woods and not less than 50 per cent in the mill per thousand feet of lumber produced.

Up to about 1907 the steadily increasing relative demand for lumber made possible the shift to the consumer of much more than the average increase in labor costs. But from 1907 to 1916, as we

⁹ Stephens, *loc. cit.*, 290. Italics are mine.

have seen, lumber prices generally did not show a net increase. Nevertheless, labor costs per unit and total manufacturing cost substantially increased. In recent years these have increased rapidly. The general result of this situation was for a few years a decline in the manufacturing profits as such. But beginning in the latter part of 1913 the standing timber, the raw material of lumber manufacture, began to share more heavily in the effect of the almost steady decline in the margin between cost and selling price. The prices of standing timber began to decline for the first time in the history of the lumber industry. Timber owners having hundreds of millions of dollars invested in standing timber found the stumpage market dull and unresponsive. Timber investments came into comparative disfavor among bankers and investment houses because lumber prices were no longer rising and because conversion into lumber was the sole means of liquidating such investments.

Haste to liquidate an unpromising investment was thus only stimulated. This resulted in still greater relative overproduction, and by the middle of 1915 lumber prices generally were almost as low as they had been after the panic of 1907. Seeing the profitableness of the great investments in raw materials threatened, and a more wasteful use of standing timber impending, a vigorous appeal was made to the government to provide some practicable method whereby, consistent with the public interest, production could be controlled, the undue waste of natural resources prevented, and the investments in standing timber protected.

How is this chain of events to be correlated with the connection above stated¹⁰ to exist between labor costs and lumber prices?

¹⁰ Stephens, p. 290; see p. 588 above. The same assertion from a slightly altered angle is made, *ibid.*, p. 291:

"Wages in the lumber industry increasing at approximately the same rate as general wages, efficiency of labor declining, and the wage cost proportionately larger than in other industries—*such a complex should constitute a material cause for the relative increase in lumber prices.*" (Italics are mine.)

In addition to the doubtful relation stated between cost and price is here to be noted the fact that during nearly ten years since the panic of 1907 there has been no relative increase in lumber prices but, on the contrary, a relative decrease despite a substantial increase in the labor cost per thousand feet of lumber. The situation prior to this period is adequately explained, on the supply side (which is here under review), by the relative exhaustion of nearby timber, by rapid increases in the average distance from the market of the main sources of lumber supply, and by the changes caused thereby in conditions of competition between regions. (See Compton, *The Organization of the Lumber Industry*, p. 113.)

Have the increasing labor costs, all other things being equal, resulted in higher lumber prices? It is true that the condition proposed, namely, that other things be equal, is not to be found in the study of economic relations in industry. The equality of other conditions must therefore be assumed. The merits of this assumption have been already discussed. Obviously, if this assumption be made, the increased labor cost in lumber manufacture has been at the expense either of (1) the consumer, in higher prices, or (2) the manufacturer, in smaller operating profits, or (3) the owner of timber, in a decreased realization upon his stumpage. The facts shown above with respect to lumber prices are indicative that during the entire period since 1907 there has been, generally speaking, no increase in prices.¹¹ During the same period operating profits have declined and likewise the realization on stumpage.

That these increases in cost have been at the expense of the investments fixed in operating plant and in raw material, and not at the expense of the public, is one of the most important features of the present situation in the industry. It is indeed the central objective fact wherein lies, in large part, the crucial public question as to the conservative use of the nation's standing timber. Unprofitable industry and conservation are incompatible in practice. If increased costs cannot be shifted, the investment, the profitableness of which is thus circumscribed, naturally becomes relatively unattractive, and the owner may be expected to liquidate his investment in favor of a more profitable enterprise as fast as the price of lumber will permit. Such pressure for early conversion of standing timber has caused much waste.

V.

It is the chief remaining task of this paper to explain why, under conditions that have existed in the lumber industry, increased

¹¹ It is to be noted that the recent increase under abnormal circumstances is not included in this statement. This increase beginning about November, 1916, has been due primarily to an acute car shortage. Competition in the sale of lumber has been virtually suspended in many parts of the country. For example, certain grades of southern pine have recently (June) been sold on an f. o. b. mill basis of \$25 per thousand feet. At the same time other manufacturers less advantageously situated with respect to present shipping facilities, although normally experiencing no trouble, are offering similar stock at \$15 to \$17 per thousand feet *at the mill* to any one who will himself provide shipping facilities therefor. Price fixation under such conditions has no connection with the cost of manufacture.

costs generally have not been shifted. The standing timber, a raw material limited in supply, has been in the long run the all-absorbent of all special *advantages* with respect to price. It is likewise the ultimate resting place of the effects of the special *disadvantages* peculiar to the lumber industry. This is not an unfamiliar phenomenon in industry, but rather the contrary.

This situation is easily explained. Stumpage, labor, working capital in the broad sense, and the agent discharging the enterpriser's function, however it be designated, are the productive agents coöperating in the production of lumber. The wages of labor (since generally speaking no special initial skill is required), the return to the working capital and the reward to the enterpriser are in the long run fixed by competition between industries, and under similar conditions these shares cannot for a long period greatly vary as between such industries competing for labor, capital, and enterpriser's skill. The value of steel equipment, for example, depends only in very small part upon the use of steel equipment in lumbering operations. But the standing timber has virtually no commercial value except to the extent to which it shares in the price paid for the lumber products into which it is converted. Furthermore, the physical amount of standing timber, which is a natural resource, does not depend upon its price. Still more important, the *effective supply* of timber, *i.e.*, the quantity of timber actually offered for conversion into lumber at any time, is now and for a considerable time in the future will be virtually independent of the price which may be secured for it.

What is the reason for this apparent contravention of economic principle? In part the condition has been a consequence of the arrant speculation characteristic, until recent years, of timber investments, resulting in much over-capitalization of timber holdings. Obviously, whether the price be high or low, the timber sooner or later will be proffered for conversion into boards. As will be shown later, the existing conditions in timber holding are forcing and promise so to continue to force timber upon the market currently, irrespective, in large measure, of the desire to withhold on the part of the owner, and within certain limits irrespective of the price of lumber. The other items of cost derive their market value from several sources. But standing timber derives its value in the last analysis only from the value of the lumber into which it may be converted. Standing timber, the beneficiary in the long run of unusual prosperity in the lumber industry, is likewise the

victim of the industry's adversity. This is why the success of forest conservation in the United States is dependent fundamentally upon the prices of lumber.

VI

There are many other generalizations in Professor Stephens' article to which I would give greater consideration if space permitted. Some of these are matters of opinion. They can be settled only by facts which, on many points raised, are not available. To attempt to find in the lumber industry as now organized the concrete illustration of simple principles of economic action is at best to encounter serious obstacles. The chain of expected sequences is frequently broken because of some defect in the organization of the industry itself. The presence of such defects constitutes the basic challenge to wise public policy in the administration of the nation's natural resources. Were they not present, the most difficult problems would vanish. To squint at them or to evade them is at the expense of a complete and fair picture of the industrial situation. But such completeness cannot be achieved within the brief compass of this paper.

It may be seriously questioned whether, as a matter of fact, concentrated or decentralized ownership of standing timber under certain existing conditions has had the greater tendency to cause actual withholding of timber from the market or from the saw. It is admitted by Professor Stephens¹² that "It is only as it [concentration] affects withholding [of timber], that it becomes a price-determining factor."

It is of course true that concentration of ownership makes monopoly more possible than does decentralized holding. On the other hand, the difference must be observed between present withholding of timber such as would arbitrarily affect present prices and concentration of holding such as may in the future develop into a substantial restraint provided certain conditions shall then exist. Moreover, concentration is a question of degree, and what is considered concentration in the holding of timber would not be so considered in many other industries. What is now probably the largest private holding of timber in the United States is that of the Weyerhaeuser Timber Company, situated mostly in the State of Washington. There are also other large, but smaller holdings. The total standing timber in the state in 1916 was approximately

¹² *Loc. cit.*, p. 296.

375 billion feet, which was being cut at the rate of nearly 1.2 per cent each year. Large holdings are, with the possible exception of California, more characteristic of the state of Washington than of any other state in the Pacific Northwest, where stands more than half of the total remaining timber of the United States.

In the adjacent state of Oregon there are approximately 530 billion feet of standing timber. But there are more than 24,000 individual holdings and only a relatively small number of large ownerships. The average quantity of timber in each holding is therefore but little more than 20 million feet, and a large proportion of these holdings are not compact. On the contrary, different tracts hundred of miles apart may be found in common ownership. Here is a case of decentralized holding by individuals most of whom are not lumbermen or financiers but lawyers, school teachers, and preachers who had been induced to "speculate a little." Oregon timber is generally of the same species as Washington timber, and is held by many competent wood technologists to be of even superior quality. But the timber is being converted into lumber at a rate of only .4 per cent each year, or only one-third as rapidly as the timber in the state of Washington.

Undue concentration, to be sure, "squints in the direction of monopoly," but whether concentration is or is not "undue" depends in considerable degree on the relation of the size, location, and compactness of the holding to the needs of economical operation in lumber manufacture. As a rule, in the Pacific Northwest the maximum of economy in manufacture has been secured by mills cutting from 25 to 40 million feet of lumber per annum. And the most economical lifetime of the average operation is about 20 years. If 25 million feet be taken as the minimum capacity of efficient mills, the average timber holding in Oregon constitutes less than a single year's supply. Furthermore, it may not be compact.

The great Weyerhaeuser Timber Company holding, on the other hand, is supplying the raw material not only to the two large sawmills of its affiliated Weyerhaeuser Lumber Company, but in whole or in part also to nearly a score of other lumbering operations in the state of Washington alone.

These two cases mark the extremes of decentralization and concentration respectively. The small holdings in Oregon under present conditions are much more a cause of actual restraint than is the Weyerhaeuser holding. The former cannot support an operation. Because of the general overcapitalization of standing timber

and of the failure to materialize of the overconfident hopes of many timber owners, both large and small, the demand for stumpage has much lessened, and the average price, as attested by current transfers, declined about 10 per cent between 1913 and 1916. Under these conditions the small owners of timber in Oregon who cannot manufacture at a profit on their own holding also cannot sell out to timber speculators because the speculative demand for timber has almost disappeared. Furthermore, the annual producing capacity already installed in the United States for the manufacture of lumber is nearly two and one half times as great as the largest output ever recorded. To install new mills on these small holdings would only add to the constant threat of overproduction and increase the degree of idleness of the sawmills taken as a whole. So these small holders cannot sell to actual operators either, since the operating capacity is already so much in excess of the need of the industry. These small holdings, therefore, in the present nature of things, cannot be sold (unless at a financial sacrifice disproportionately great). They cannot profitably be converted into lumber, because of the superior efficiency of the larger operations. They cannot be pooled into compact groups convenient and practicable for operating purposes, both because the law interposes obstacles and because of the vicarious nature of most of the owner-ships. Under these conditions the withholding of timber is inevitable although unwilling.

Meanwhile many of the larger holdings also are being withheld from the market and from the saw in the manner described by Professor Stephens.¹³ This is especially true in California, where there are only 22 milling plants steadily sawing redwood. These have had a total output during each of the past five years of less than 500 million feet, but the total amount of merchantable red-wood timber in private ownership is nearly 100 billion feet. Hundreds of holdings, many of them large, are as yet unoperated. The same situation prevails in many other lumbering regions. On the other hand, many of the largest holdings are the ones that are contributing the greatest proportionate amount to current manufacture. Some of them are being divided and compacted according to the needs of efficient operation.

The ownership of standing timber, which was formerly the chief source of profit to the lumber industry, has in a large measure, at least in the Pacific Northwest, become substantially an industrial

¹³ *Loc. cit.*, pp. 296, 297.

burden. Private ownership undertook a tremendous load in attempting to carry four fifths of the nation's timber, equivalent to nearly sixty years' supply at the present rate of cutting, even allowing for no new growth of merchantable timber in the meantime. Speculation has inevitably characterized the whole enterprise. It was unavoidable because of the uncertain future for lumber. But speculation has practically driven conservative capitalization out of the timber investment field. The result has been that prices as high as \$2.00 to \$2.50 a thousand feet have been actually paid for western timber which in all probability cannot economically be cut for forty or fifty years to come. Many speculators sold out while stumpage prices were high, leaving an over-capitalized fixed investment for later owners to struggle with.

The tradition of the industry has been that "stumpage prices double every ten years." A smaller return is not considered satisfactory. But stumpage prices have not risen materially in the last ten years, and for a time they have declined. Such a situation has played havoc with the expectations of many timber owners. The profitableness of investments in standing timber capitalized at billions of dollars is at stake. Big holdings are being cut up into smaller units more suitable for operating. Small holdings are usually too small to support an operation, and, as has been seen, are therefore withheld from the saw, the holder having practically no alternative. This whole situation which promises to fasten itself upon the industry is the chief reason why "price" has failed recently, in large measure, to be the regulator of the holding, or withholding, policy of timber owners.

VII

Another important factor apparently not considered by Professor Stephens, which has largely determined the character and extent of withholding of timber irrespective of the centralization or decentralization of holding, is the relative "accessibility," in the economic sense, of different stands of timber. This factor includes (1) cheapness of access of transportation facilities, (2) nearness to market, (3) topography, (4) density of stand, (5) quality of timber, etc. In the nature of things most of the timber now standing must be withheld from the saw over a long period. The real question at this point is not whether there is or is not withholding of timber, but whether the timber is being reasonably cut in the order of relative accessibility. The number of

ownerships is so large and the differences in financial strength of owners so great that hard-pressed owners in large numbers are cutting timber that is much less "accessible" than hundreds of billions of feet in other ownerships less hard pressed financially. Nearly half of the capital invested in the operating timber holdings in the West has been borrowed. This is responsible for much of the pressure for early liquidation, since the legal interest must be paid. Payment cannot be postponed simply because prices are low. The lower the prices the more lumber must be cut and sold. Such is the start of the "vicious circle" of prices of which the lumber industry has been often a victim.

That there has been cutting of timber of very unequal "accessibility" is attested by the following comparison drawn from the actual record of 119 representative lumbering operations in 1914. The total cost of logging, it is obvious, covers practically all the differences in operating cost due to differences in "accessibility." In the case mentioned the modal group of logging costs fell between \$3.00 and \$4.50 per thousand feet. But the lowest cost was \$1.62 and the highest \$10.43 per thousand feet.

Much timber is being cut which should not now be cut at all, since it can be sold only at a loss. The prevalence of this situation during certain recent periods has resulted in widespread failures, and in the forced sale of entire holdings at relatively low prices. The resulting bankrupt competition has had its usual effect on conditions in the industry, tending to cause still further recapitalization of investments at lower figures. What is probably needed is a systematic national forest policy, one not respecting ownership lines, but securing the cutting of timber in the order of relative "accessibility." Whether this can be accomplished through private enterprise depends in part upon the education of the public and the further enlightenment of the lumbermen, but in addition it depends upon the fitness of the laws governing industry to promote the accomplishment of this purpose desirable both for the industry and for the public.

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REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Community. A Sociological Study. Being an Attempt to Set Out the Nature and Fundamental Laws of Social Life. By R. M. MACIVER. (New York: The Macmillan Company. 1917. Pp. xv, 437. \$3.75.)

This is easily the most notable book of the year in sociology. It is the more notable because its author, now associate professor of political science in the University of Toronto, confesses in his preface (p. viii): "In an early essay I remarked that there was no definite science of society beyond that contained in such specific studies as economics and politics. That view I now believe to be wholly mistaken, and I hope that this present volume adds one to the many disproofs of it revealed by the recent progress of the subject."

The expectations of the author will not be disappointed by the judgment of his colleagues in the social sciences; for that judgment will undoubtedly be that the book is one of the most important in the field of sociology published during the present decade. It is of especial value to economists and political scientists, because it delimitates, perhaps more clearly than any other work, the field and problems of sociology from those of the special social sciences, while at the same time exhibiting their vital connections.

The book opens with a discussion of the meaning of social fact and social law, of the relations of community and association, and of the place of sociology among the sciences. The author decides that the term "community" expresses best the object which sociology endeavors to study, rather than "society" or "association." He then proceeds to an analysis of "community," showing that it is to be thought of, not as an "organism" or "mind" but as "any area of common life" (pp. 21, 151) shared in some degree by distinct individuals. All social relations are, however, psychical relations, relations of minds. While "community is no greater mind," yet "it is created by that activity of men's minds in which they relate themselves incessantly to one another" (p. 95). What relates them is *interest*. Hence "the interests of men are the source of all social activity, and the changes in their interests are the source of all social evolution" (p. 99). To specific interests there correspond special associations which arise within the community to further those interests. These special associations are the

source of institutions, which are customs that have been sanctioned by the common will. The association is the living thing; the institution is but a form *instituted*, established, by the will of the community to serve some particular interest. Together they make up the structure of community.

The laws of the development of community are taken up and discussed in the final section (book III) of the work. This is the most important and constructive part of the work. After showing that the popular idea that communities pass through a regular cycle of growth, maturity, decay, and death is without scientific foundation, the author proceeds to discuss what he considers the three primary laws of communal development. The first is that "socialization and individualization are the two sides of a single process" (p. 214); or in other words, "the differentiation of community is relative to the growth of personality in social individuals" (p. 226). From this law many important generalizations flow regarding both community and personality. For example, real opposition between the interests of the individual and of the community, it becomes evident, is pathological, not normal. The second law is that "the development of community involves the gradual transformation of conflicting and parallel like interests into concordant like interests through the establishment of secondary common interests" (p. 327). In other words, the development of social life means a passage from methods of direct antagonism and of competition to methods of coöperation, hence a correlation between socialization and the principle of communal economy. Under this law the economic aspects of the social life receive extended consideration. The third law is the law of the correlation of socialization and the control of environment, in accordance with the general law that the higher the life "the less is it directly modified by the changes within its physical environment and the more does it modify that environment and its changes into conformity to its own purposes" (p. 383). From this standpoint the relations of community and environment are carefully considered.

It is impossible to outline in a satisfactory manner the argument of a book so fertile in ideas. The only fair thing that the reviewer can do is to urge all interested in social science to read the book. It is far easier, however, to criticise the work, and in certain respects it deserves criticism. It is doubtful, for example, if the author has rendered sociology a service by adding another

terminology to the many already in existence. It is not clear that the term "community" expresses better the subject-matter of sociology than such terms as "society" or "social life," as equal ambiguity attaches to its use. The use of "association" in the narrow sense of specialized, *purposive* association is arbitrary, and out of harmony with the general usage among sociologists, among whom it is regularly employed to include all forms of social life, and so as nearly synonymous with "social process." Again, it is unfortunate that Professor MacIver uses so exclusively in his sociological analysis subjective terms, such as "interests," "values," "purposes." While this is also the practice of many sociological and economic writers, unquestionably the trend of modern science is to substitute for such subjective terms objective terms wherever it is possible to do so. Finally, Professor MacIver's attempt to make psychology purely a subjective science, the science of "the knower" (p. 60), and thereby divorce the social sciences quite entirely from it, will scarcely meet with approval on the part either of psychologists or of a large number of sociologists. These are, however, on the whole, minor defects in a work whose substantial value nearly all students of the social sciences will heartily recognize.

CHARLES A. ELLWOOD.

University of Missouri.

The Physical Basis of Society. By CARL KELSEY. (New York: D. Appleton and Company. 1916. Pp. xviii, 406. \$2.00.)

Outline of Applied Sociology. By HENRY PRATT FAIRCHILD. (New York: The Macmillan Company. 1916. Pp. x, 353. \$1.75.)

Not so much a work on sociology as a collection of the data of sociology is the volume by Professor Kelsey. The author has not so much attempted to put out an original piece of investigation or a piece of close abstract reasoning within the traditional field of sociology as to assemble in the eleven chapters of his book a mass of illustrative and convincing data preliminary to the broader field of sociology. Everywhere he is primarily concerned in his viewpoint with the conditions of social existence and social development. He begins with the most objective and most indirect influences which operate upon man and his institutions—the physical conditions of the earth—and proceeds through a consideration of the struggle for existence and mutual aid, man's control over

nature, human evolution and heredity, race and sex differences, and population, over finally to a consideration of the role of institutions and the conditions affecting progress.

Two things especially are worth noting about this book. One is the great mass of data which has been assembled, especially under the earlier chapter headings. The last chapters seem to show some traces of having been hurriedly written and are not so rich in source materials, though they are more productive of sociological generalizations. In fact, the volume must be employed largely as a source book if used as a text, for the wealth of data which it contains would embarrass both teacher and student who attempted to use it in any very formal way. The data here assembled give evidence of the most extensive reading through sociological and often non-sociological literature for the sake of securing concrete bases for the inductions in the fields indicated. One might wish, however, that the author had added to his wealth of source materials a larger fund of interpretative generalizations, thus synthesizing them constructively into sociological theory.

The second important feature of the book is that it symbolizes very markedly some of the newer tendencies in the development of sociology. Recently we have heard a good deal of the fact that sociology must be based on biology and psychology; and some writers, doubtless including Professor Kelsey, would say geography. In a measure we have gotten away from the purely philosophical and subjective approach to sociology on the one hand and from the more or less pseudo-scientific approach from the standpoint of anthropology on the other. But most sociologists have found it rather difficult to go directly to the substitute basis of presenting the essential facts of geography, biology, and psychology as they affect human life. This is what needs to be done in constructing the new sociology and this Professor Kelsey has apparently sought to do. In this attempt lies his merit largely. Doubtless others will improve on his method, for they will seek to interpret where he is largely content with collecting and arranging data. But the work of collecting is preliminary and is therefore, at this stage of sociological development, of high value.

Professor Fairchild's "Outline" is essentially a guide to the study of society in its concrete adjustment aspects. It follows the lead most cultivated by the sociologists, especially in class instruction in the elementary courses, within the last ten or fifteen years. That

is, it is primarily "practical" or "applied" in the general sense of being concrete rather than abstract, though it is in no sense a study in the concrete methods of social adjustment technology. This movement away from the older abstract sociology, so manifest in this textbook, is perhaps not so much a protest against abstraction in itself as it is a more or less conscious search for adequate data upon which to build new abstractions in the place of the old ones which were too often made without sufficient facts.

Very recent tendencies in sociology are also manifest in this volume through the emphasis given to the economic aspects of social adjustment and to the closely related problems of population. These two subjects, in their various aspects and applications, occupy more than 250 of the 332 pages of reading matter in the book. The largest contribution of Professor Fairchild's book to the textbook literature of sociology is in its clear presentation of the relationships between wages, working conditions, efficiency, housing, and the more specific aspects of the problem of living standards and social welfare. No other general textbook goes so fully into these matters, and yet they are not here discussed from a merely descriptive or analytical standpoint. Conclusions and implications are most carefully drawn from the data presented. In his discussion of population the author follows in the main the conclusions of Malthus, though he works out in more detail some of the correlations of the factors determining increase and decrease of population. Towards socialism and feminism, the two radical movements to which he gives most space, he maintains an appreciative attitude, though he is more favorably disposed towards the latter than he is towards the former. The discussion of the aesthetic, intellectual, and religious phases of life is least complete and satisfying. To these aspects, which loom large in the actual living processes, is given less than forty pages.

On the whole there is a marked absence of the conventional and static classifications of subject-matter, such as is found in some of the textbooks on "social problems." There is no chapter entitled crime, or poverty, or the city, or the rural problem, though these subjects are discussed in some connection or other. They are not isolated and therefore largely sterilized but are considered as phases of a larger whole. The book is not particularly original. Perhaps no textbook in the general field of applied sociology would impress one as strikingly so. Furthermore, it may be said to be

rather elementary on the whole, but it has the merit of being clear and usually convincing.

L. L. BERNARD.

University of Missouri.

NEW BOOKS

ARIAS, I. G. *Principii di economia commerciale*. (Milan: Società Editrice Libraria. 1917. Pp. 948.)

CROBBI, U. *Trattato di economia*. (Milan: Società Editrice Libraria. 1917.)

ELLWOOD, C. A. *An introduction to social psychology*. (New York: Appleton. 1917. Pp. xii, 343. \$2.75.)

To be reviewed.

ELLWOOD, C. A. *Principes de psycho-sociologie*. Translated from the English by P. COMBERT. (Paris: Giard & Brière. 1917.)

ELY, R. T. *Exercises in Ely's "Property and contract in their relations to the distribution of wealth."* (New York: Macmillan. 1917. Pp. 34.)

FISHER, I. *Recherches mathématiques sur la théorie de la valeur et des prix*. Translated from the English by JACQUES MORET. (Paris: Giard & Brière. 1917. 6.50 fr.)

GRAZIANI, A. *Istituzioni di economia politica*. (Torino: Bocca. 1917. 25 l.)

LEAVITT, F. M. and BROWN, E. *Elementary social science*. (New York: Macmillan. 1917. Pp. 142. 80c.)

MCVEY, F. L. *Economics of business*. Modern business, vol. 2. (New York: Alexander Hamilton Inst. 1917. Pp. 346.)

This book is an introductory treatise on economics. It follows traditional lines in arrangement; lacks freshness in treatment and illustration; and is often infelicitous and open to misapprehension in wording. One has a suspicion that it was written or dictated hurriedly. What would the uninformed person learn from the following statement (p. 93) about consumers' coöperation? "The Rockdale (*sic*) Pioneers are the forerunners of this movement, and so successful has it been that the Scottish Wholesale Society has acquired an enormous business amounting to millions of pounds annually." The English Wholesale is several times as large as the Scottish. Robert Owen's work at New Lanark is ascribed (p. 93) to "the latter part of the eighteenth century" although he did not go to that place until 1800 and his achievements there were in the first part of the nineteenth century. It is stated (p. 115) that the act of 1791 provided for a dollar consisting of 23.22 grains of pure gold and on page 181 that under the Sherman act the government bought 4,000,000 ounces of silver monthly. The figures should, of course,

have been 24.75 and 4,500,000. On page 269 there is an arithmetical error in capitalizing an income which is not merely typographical since another numerical statement dependent upon it is consistent with the mistake. On page 308, in the second column of the table, the \$ sign would mystify the uninitiated. On page 324, speaking of Karl Marx, the author says: "Having studied Darwin and having made careful original investigation, he emphasized the inevitableness of the class conflict." Unfortunately for this contention the *Communist Manifesto*, in which the doctrine of the class struggle is so vigorously proclaimed, was published in 1848 and the *Origin of Species* in 1859. On page 333 it is said that "already legislation exists in forty-eight states providing for workmen's compensation for industrial accidents," the book being dated October, 1916. According to Bulletin 203 of the United States Bureau of Labor issued in January, 1917, thirty-two states, three dependencies, and the federal government have enacted compensation acts. The purpose and usefulness of trade unionism might have been set forth much more forcibly in the space used. Four propositions selected by the author as the basis of socialism are given as disconnected principles while they are causally interdependent, and the one which socialists emphasize as the source and origin of the others is given last. There is not space to call attention to what seem to the reviewer tristic, inconclusive, and *ex cathedra* treatments of many doctrinal and practical questions although the space used would ordinarily have allowed a reasonably good statement.

HERBERT E. MILLS.

PARETO, V. *Traité de sociologie générale*. (Paris: Payot. 1917. Pp. 800. 15 fr.)

PEDDIE, J. T. *A national system of economics. With a consideration of the Paris economic resolutions and of their influence on nationality*. (London: Univ. of London Press. 1917. Pp. 299. 5s.)

SCHELLE, G. *L'économie politique et les économistes*. (Paris: Doin. 1917.)

SELIGMAN, E. R. A. *Principles of economics*. (New York: Longmans. 1916. Pp. liv, 711. \$2.50.)

This popular work which was rewritten in the sixth edition only two years ago is again revised. Figures and authorities have been brought up to date and the text is changed in a few places because of events since 1914. There is not uniformity, however, in this revision. For example, a chart giving the index number curve of commodities (p. 464) is brought down to 1916; but under wages an excellent chart (p. 424) is brought down only to 1907, and figures upon the movement of nominal and real wages only to 1903. Upon these as a basis Professor Seligman leaves unchanged his generalization "wages have increased so that the laborers enjoy a continually greater command over the conveniences of life." In view of the facts and statistical literature of the last ten years, this statement should be

modified at least to the extent of dropping the word "continually." The reviewer has used this textbook since its first appearance as one of the required texts in large introductory classes and he has reviewed in recent years for this journal a number of books (in the main dreary reading) described as prepared "for the general reader." From the standpoint either of the college class-room or the non-academic reader, there are, in his opinion, not more than one or two works comparable with Professor Seligman's *Principles* and its continuous popularity is well deserved.

H. E. M.

Economic History and Geography

The Chartist Movement in its Social and Economic Aspects. Part

I. By FRANK F. ROSENBLATT. Columbia University Studies in History, Economics and Public Law, Vol. LXXIII, No. 1. (New York: Longmans, Green and Company. 1916. Pp. 248. \$2.00.)

The Decline of the Chartist Movement. By PRESTON WILLIAM SLOSSON. *Ibid.*, Vol. LXXIII, No. 2. (New York: Longmans, Green and Company. 1916. Pp. 216. \$2.00.)

Chartism and the Churches: a Study in Democracy. By HAROLD UNDERWOOD FAULKNER. *Ibid.*, Vol. LXXIII, No. 3. (New York: Longmans, Green and Company. 1916. Pp. 152. \$1.25.)

So stupendous were the influences of the Industrial Revolution that even now the perspective is scarcely sufficient to allow us to appreciate its results upon life in all its aspects, upon political, religious, and educational thought, and upon social movement. It is gratifying to know that careful study is being made of one of the most important and most neglected episodes in the first half of the nineteenth century and that Professor Seligman's library makes this possible for American students. It is to be hoped that these three monographs under review will be followed by others upon this period. Dr. Rosenblatt's *The Chartist Movement in its Social and Economic Aspects* is but the first part of a larger projected work made impossible by the war. It brings the history of Chartism down through its first stage only, culminating with the Newport Riot of 1839. There seems no particular reason for the qualifying phrase in its title since the political side of the movement is as much to the front as the social and economic. After chapters on Prototypes and The Whig Rule come three treating of the economic basis and underlying causes of Chartism; and

the remainder of the volume is given to a narrative of the movement and accounts of its leaders. The preliminary chapters are inadequate and disappointing. In the opinion of the reviewer they should either have been made much more exhaustive or cut down to a few introductory paragraphs. The narrative chapters bring out clearly the conflicting attitudes of the *moral force* and the *physical force* factions. There were interesting anticipations of modern syndicalist attitudes in the proposal of a *sacred month*, in reliance upon the lowest unorganized proletariat, and in the advocacy of spontaneous reckless outbreaks. The work is thoroughly and impartially done; but one has a feeling that the material had not been well enough digested and assimilated to enable the author to write with breadth of view and sense of proportion.

Dr. Slosson in his *The Decline of the Chartist Movement* brings out clearly the essential character of Chartism and its relationships. The passage of the Reform Bill of 1832 revealed the divergent aims of those who had achieved it. The middle class political radicals were laissez-faire and conservative so far as social and economic reforms were concerned. The working class aiming at economic improvement found that the Reform Bill had made its political participation less probable than ever, since its former allies were now on the other side. Chartism, a product of economic distress, of Owenism, of the ten-hour movement, of antagonism to the new poor law, of cheap money agitation, of trade-union weakness, of distrust on the part of working class radicals of the Free Trade element, was considered by both followers and opponents to be a class-conscious proletarian agitation aiming at a rectification of economic inequality. To that end it advocated the use of taxation, coöperative industry, state credit for working-class industry, abolition of land monopoly—all of which were conditioned upon realization of the People's Charter. But its unity was on negative policies and in its positive program three divergent tendencies were apparent, namely, collectivism, individualism, and a foreshadowing of single-taxism. Herein was the real cause of decline. United as to method but not as to aim, there came disintegration as a result of attainment of free trade in food, better factory laws, amelioration of the poor law, and other causes of increasing working class well-being. With the decline of the organized revolutionary movement upper class apprehension diminished so that gradually most of the economic and political ends of the movement have been secured. Further, as the Chartist

movement had temporarily absorbed the working-class energy that had earlier found outlet in coöperation and trades-unionism, after 1850 these two democratic working class undertakings reclaimed their own and the working class political agitation temporarily subsided. But Chartism had taught the workingmen that strength might come from party organization, had educated them through the party periodicals, had given them an international point of view, and had sown the seeds of anti-militarism, woman suffrage, and socialism. Dr. Slosson writes with a breadth of view and grasp not always found in doctoral theses.

The third of these monographs, Dr. Faulkner's *Chartism and the Churches* is a valuable contribution to a work which it is to be hoped may be written by some one in the not remote future upon the relation in the nineteenth century of social reform movements, ecclesiasticism and religion. Its chapter headings indicate its content: The Attitude of Chartism towards the Church; Chartist Substitutions for the Prevailing Christianity; Attitude of the Church towards Chartism; The Positive Contributions of the Church to the Chartist Movement. The work reveals most extensive use of the voluminous literature of the subject, is interesting and free from bias. The indexing of this volume and Dr. Slosson's is inadequate. The chief defect of this study is in its failure to make connection with anti-ecclesiastic and anti-clerical influences which in the period preceding Chartism had come to be widespread through Owenism. It was not only Owen's personal radical religious views but his fundamental social philosophy which aroused bitter religious controversy with widespread and continuing influence upon the British workingman. In asserting that "man's character was made *for* him, not *by* him" Owen attacked the almost unanimous prevailing religious opinion as to man's individual moral responsibility and drew fierce attack from Churchman and Dissenter alike. The Owenite movement developed a religious organization with all its paraphernalia of creed, dogma, meetings, Sunday Schools, ritual, and hymn-book. While this was not a part of the field chosen by Dr. Faulkner, it certainly deserved, as an immediate forerunner of the movement described by him, more attention than one passing allusion.

The second quarter of the nineteenth century was one of the amazing periods of revolutionary thought and movement. On the continent of Europe two political revolutionary periods,

the movements inspired by Cabet, Fourier, St.-Simon, and other Utopians, the beginnings of Marxian socialism, of anarchism, of state socialism, are some evidences of ferment. In England the later phases of Owenism, the Reform Bill, Chartism, visionary schemes of the union of all workers in single vast organizations, various coöperative undertakings, the Corn Law agitation, all revealed the restless spirit of the age. In the United States it was a quarter century not only of very remarkable industrial invention and development but also of independent thought and new movement. Jacksonian democracy, anti-monopoly agitation, visionary grandiloquent trades-unionism, Owenism, Fourierism, the establishment of many communities like Brook Farm and Oneida, the temperance movement, abolition, woman's rights, Frances Wright's "Free Enquirers," the anti-masonic furor, Mormonism, Millerism, spiritualism, kept life from growing dull. While not a great period in the world's history, it was bizarre and fascinating. Unrest affected every phase of life and thought. Monographs like those under review prepare the ground for a history of the period which shall bring these diverse religious, political, economic, and social movements into relation; and, if a guess may be made, find their explanation and cause in the general disturbance of life which grew out of what we call the Industrial Revolution.

HERBERT E. MILLS.

Vassar College.

Economic Development of Modern Europe. By FREDERIC AUSTIN Ogg. (New York: The Macmillan Company. 1917. Pp. xvi, 657. \$2.50.)

Like the author's earlier volume on *Social Progress in Contemporary Europe*, this book aims not to explore new fields but to describe the results reached by the investigations of others, and to illuminate only the most significant features of recent and contemporary history. For his task the author shows marked qualifications. He has read widely, uses his authorities with discrimination, selects and arranges his materials skilfully, and sets forth his product in good English. He is accurate; slips in matters of fact are infrequent and unimportant. He provides for further study lavish lists of references, on which the only criticism to be passed is that they lack such notes of appreciation as will guide the untrained reader. Altogether, his book offers the best survey known to the reviewer of the recent economic history of Europe.

The most difficult problem before the author of a book of this kind is that of proportion—what topics to include, and what space to allow to each. Professor Ogg followed these principles: to devote most of his attention to the nineteenth century, contenting himself with a summary sketch of preceding conditions; to omit from consideration the more technical aspects of economic history, such as public finance; and to confine himself in general to the history of three leading countries, the United Kingdom, France, and Germany. A substantial volume is none too big to cover the topics that are left by these restrictions, and the author has in the main justified his principles by the results. He would have done well, in the reviewer's opinion, to have applied his first principle more strictly. Part I, "Antecedents of nineteenth century growth," occupying 114 pages, is the least effective portion of the book; it leads the author into parts of the field where it is extraordinarily difficult to be brief and yet exact, and tempts him either to simplify artificially, or to describe conditions as confused when in fact they were complex. Part II, "Agriculture, industry and trade since 1815," pages 117-340, covers the development of production in the leading countries, with an added chapter on Russia; part III, "Population and labor," pages 343-474, is devoted mainly to the organization and regulation of labor; and part IV, pages 477-641, treats of "Socialism and social insurance."

This sketch of the contents of the book will suggest that feature of its plan which is most open to criticism, the emphasis on social history at the expense of economic. The development of the speculative-capitalistic system is touched upon in various places, and is treated thoroughly from the standpoint of the laborers; but description and appreciation of the part played by the leaders of industrial development are inadequate. The topic is not an easy one to handle, for it is bound up with the development of business methods, and involves institutions of private credit which are elusive when attempt is made to sketch them in their general aspect. Yet it can scarcely be denied that modern capitalism is an aristocratic rather than a democratic product; and that the way of its explanation must proceed from the center of industry, where are the leaders and innovators, rather than from the mass of the laborers. It is ungracious, however, to criticise a book for what it does not seek to do, when so much in it is good and is well done.

Both teachers and students will be grateful to Professor Ogg for what he has provided them.

Yale University.

CLIVE DAY.

Standards of American Legislation. An Estimate of Restrictive and Constructive Factors. By ERNST FREUND. (Chicago: The University of Chicago Press. 1917. Pp. xx, 327. \$1.50.)

This book is the outgrowth of a series of lectures delivered at Johns Hopkins University in 1915. Its purpose is to suggest a system of positive principles to guide and control the making of statutes. The work is rather technical, presupposing a considerable knowledge of law and legal phraseology, yet it can be read with considerable profit by economists.

Chapter I, Historic Changes of Policy and the Modern Concept of Social Legislation, will perhaps prove the most interesting to economists. In this chapter the author analyzes the drift of modern legislative thought and its significance. He first shows the process whereby free and equal personal status has gradually been established. Through the abolition of slavery and serfdom, the removal of legal class distinctions, the recognition of the legal rights of aliens, and the emancipation of wives from domestic subjection, liberty and equality have received practically universal recognition. The main exceptions are the treatment of the colored race and children. The disability of the child is of course inevitable, but the rights of parents are more and more assuming the character of a trust. Legislation to punish cruelty to children and to establish a system of public care of juvenile dependents is liberating children from the abuse of domestic power, and thus represents a distinct triumph for the doctrine of human personality. The author next traces the development of the doctrine of freedom of thought. Until far into the seventeenth century it had been a commonplace of public policy that opinion must be controlled in order to insure the safety of the state. But gradually religious liberty has been established throughout the civilized world, and the free expression of opinion on all matters, but especially on political topics, safeguarded. The present war is, of course, leading to the reestablishment of the control of public opinion by the state, but submission thereto is regarded as "one of the most remarkable achievements of democracy and of education in public affairs."

The establishment of the foregoing rights of personality and of freedom of thought have been effected in the main by the mere removal of legal and other restraints; the movements toward the repression of unthrift and dissipation, the protection of public health and safety, and social legislation have, on the other hand,

involved an extension of the field of legislative activity and control.

It is interesting to observe that the activity of the state against the three leading forms of unthrift—drink, gambling, and vice—has reached its highest development in American democracy. Absolute prohibition, a radical interference with personal liberty, is being widely adopted; gambling, particularly where it takes the form of lotteries, is generally prohibited; and by means of “white slave” legislation a determined attempt is being made to suppress prostitution. The standards of this “moral” legislation are higher, it is true, than the standards of enforcement; yet the insistence upon high abstract moral ideals has a valuable educative influence.

Legislation to protect health and safety is being enacted in increasing quantity. This legislation has been necessitated by the utilization of the newly invented mechanical devices in the service of industry and by the marked progress of science in discovering the causes of diseases and their remedies. Though we live under free institutions, we submit to public regulation and control in ways that, according to the author, would appear inconceivable to the spirit of oriental despotism.

The legislative policies already described show two main tendencies: an increased appreciation of the value of individual human personality; and the adoption of the welfare of the mass of the people as the controlling consideration, rather than the security of the state and the established order. Both these tendencies are combined in the modern movement toward social legislation, a term referring to “those measures which are intended for the relief and elevation of the less favored classes of the community.” Though systematic relief has been given in England since 1601, yet the term “social legislation” was hardly used in connection with reform movements until recent years. This is because social legislation represents a new departure in legislative policy. Whereas the old relief was not connected with industry, and stigmatized the recipient, the new compensation systems (a phase of social legislation) carry no stigma or disability, but seem rather to be a partial compensation for injustice suffered. In enacting this social legislation the state so far has not departed markedly from its attitude of neutrality in the struggle between capital and labor, but the development of a new social conscience and of the

demand for increased state control points to the adoption of a new policy in this respect.

In the remaining chapters of the book—their importance is much greater than the proportion of space devoted to them in this review—the author shows why the common law has not met the modern social needs (ch. 2); how modern welfare legislation has endeavored to give effect to the altered concepts of right and wrong and of the public good, and what the nature of its task is (ch. 3); how the advance of legislation to new fields of control has been checked by constitutional provisions (ch. 4); how the existence and extension of the right of the courts to declare laws unconstitutional has retarded legislative progress (ch. 5); what are some of the fundamental principles to be observed in the enactment of legislation (ch. 6); and the extent to which courts, legislative practice, and jurisprudence are constructive factors (ch. 7).

The book is of a high order. The treatment is scientific, the mode of presentation illuminating, and the style excellent. It more than fulfils the author's modest wish to make some "slight contribution to the rapidly growing movement for the improvement of our statute law." This is particularly true since the author is imbued with the social point of view, a point of view which bids fair to exert an increasing influence on legislation.

ELIOT JONES.

Leland Stanford Junior University.

NEW BOOKS

AMBRAVANESWAR, S. A. *Progress and problems of industrial India.* (Trichinopoly: Published by the author. 1917. Pp. 30.)

BIZZELL, W. B. *The social teachings of the Jewish prophets; a study in biblical sociology.* (Boston: Sherman, French. 1916. Pp. 237. \$1.25.)

BORTHWICK, J. D. *The gold hunters; a firsthand picture of life in California mining camps in the early fifties.* Edited by H. KEPHART. (New York: Outing Pub. 1917. Pp. 361. \$1.)

BROOKS, E. C. *The story of corn and the westward migration.* (Chicago: Rand, McNally. 1916. Pp. 308. \$1.)

CAMBRE, E. V. *The economic future of Mexico.* (New York: Latin-American News Assoc. 1917. Pp. 19. 5c.)

CARTER, H., editor. *Industrial reconstruction. A symposium on the situation after the war.* (London: Unwin. 1917.)

CROCKETT, W. H. *Vermont. Its resources and opportunities.* (Montpelier: Secretary of State. 1917. Pp. 122.)

DAVIS, J. S. *Essays in the earlier history of American corporations.* Nos. I-IV. Harvard economic studies, vol. XVI. (Cambridge: Harvard Univ. Press. 1917. Pp. xiii, 547; x, 419. \$2.50 each.)
To be reviewed.

DOMINIAN, L. *The frontiers of language and nationality in Europe.* Published for the American Geographical Society of New York. (New York: Holt. 1917. Pp. xviii, 375.)

DU BOIS, J. T. and MATHEWS, G. S. *Galusha A. Grow, father of the homestead law.* (Boston: Houghton Mifflin. 1917. Pp. xi, 305. \$1.75.)

FOAKES-JACKSON, F. J. *Social life in England, 1750-1850.* (New York: Macmillan. 1916. Pp. ix, 338.)

FUCHS, C. J. *Die deutsche Volkswirtschaft im Kriege.* (Tübingen: Mohr. 1915. Pp. 75.)

GELBERT, L. N., compiler. *Facts about Georgia; a state rich in resources and opulent in opportunities.* (Atlanta: Chamber of Commerce. 1916. Pp. 277. \$1.)

Material about the economic and agricultural conditions of Georgia.

HAYEM, J. *Mémoires et documents pour servir à l'histoire du commerce et de l'industrie en France.* Quatrième série. (Paris: Hachette. 1916. Pp. 319. 7.50 fr.)

The fourth series of M. Hayem's collection comprises ten items on the history of industry and commerce in France from the seventeenth to the early nineteenth centuries. Based largely on materials from the provincial archives, this series, like those preceding, makes a substantial contribution to French economic history.

C. D.

HODGES, LER. *Petersburg, Virginia, economic and municipal.* (Petersburg, Va.: Chamber of Commerce. 1917. Pp. 166.)

KENT, C. F. *The social teachings of the prophets and Jesus.* (New York: Scribner. 1917. Pp. 13, 364. \$1.50.)

LEVETT, A. E. *The black death.* (Oxford: Clarendon Press. 1916. Pp. vi, 220.)

MUKERJEE, R. *The foundations of Indian economics.* (New York: Longmans, Green. 1916. Pp. xxvi, 515. \$3.)

The author, who has been a research student of Calcutta University, and who has for some time been investigating the economic organization of modern India, collects in this volume his scattered studies, and provides a comprehensive and useful survey of the conditions of production in that part of the British Empire. The book sketches the economic influences of the Indian system of family, caste and religion, presents detailed studies of the principal cottage and village industries, describes the rural system of trade and credit, and discusses the future of the organization.

The book will appeal to the interests of students of economic his-

tory as well as to those particularly concerned with the problems of modern India. Rural India is just emerging from the stage of village economy, with barter more important than cash transactions and with occupations largely determined by status, and with custom stronger than contract and competition. The caste system, with its curious economic restrictions and inconsistencies, offers many contrasts as well as some similarities to the medieval guilds, but the dominance of the merchant over the artificer, and the power of the petty capitalist in the developing organization, are features familiar to the student of European history.

The author believes in the vitality of many of the village industries, and suggests measures both technical and economic to strengthen them in the struggle with the "big business" which even in India now threatens to sweep the field.

CLIVE DAY.

PATTEN, S. N. *Culture and war*. (New York: Huebsch. 1916. Pp. 62. 60c.)

PORTER, E. C. and SLACK, A. J., editors. *Industrial America*. In Russian. (New York: American Russian Chamber of Commerce. Pp. 450. \$2.)

RODDY, H. J. *Physical and industrial geography of Lancaster county, Pennsylvania*. (Lancaster, Pa.: New Era Prtg. Co. 1916. Pp. vi, 113. 75c.)

TARIS, E. *La Russie et ses richesses*. (Paris: Roge. 1917. 4 fr.)

TRYON, R. M. *Household manufactures in the United States 1640-1860. A study in industrial history*. (Chicago: Univ. of Chicago Press. 1917. Pp. xii, 413. \$2.)

To be reviewed.

WHITMAN, P. P. *Seattle, an industrial city. Showing development of eastern manufacturing centers and needs of Seattle*. (Seattle: Seattle Chamber of Commerce. 1916. Pp. 32.)

The Virgin Islands. A description of the commercial value of the Danish West Indies. (New York: National Bank of Commerce. 1917. Pp. 34.)

La legislazione di guerra. Conferenze tenute nell'anno 1915-16 dai Soci Augusto Graziani, Domenico Schiappoli, Enrico Presutti, Roberto de Ruggiero, Angelo Mariotti, Federico Celentano. (Napoli: Circolo Giuridico di Napoli. 1916. Pp. 278.)

Agriculture, Mining, Forestry, and Fisheries

Land Tenure in the United States with Special Reference to Illinois. By CHARLES LESLIE STEWART. University of Illinois Studies in the Social Sciences, Vol. V, No. 3. (Urbana: University of Illinois. 1916. Pp. 135. 75 cents.)

Dr. Stewart tells us in the preface to his monograph that it is

based largely upon United States census statistics and explains the reasons why he has taken Illinois as a type study of land tenure. These reasons are the following:

(1) Its size and importance in the production of grain; (2) the variety of conditions in its agricultural economy; (3) its location in the great farming region of the Mississippi valley; (4) the ease of access its farmers have to large local markets as well as to other domestic and to foreign markets; and (5) the fact that, agriculturally, Illinois is neither an old nor a new state.

The scope of Dr. Stewart's work is indicated by the five chapters into which it is divided: A Sketch of Land Tenure in the United States; Tendencies in the Agricultural Economy of Illinois; Changes in Land Tenure in Illinois; A Description of Farm Operators in Illinois; The Relation of Tenure to Rural Economic and Social Conditions in Illinois. Special mention should be made of the many unusually clear maps illustrating statistical data. There are eighteen of these. The work is well planned and carefully executed, reflecting credit upon the author and upon Dr. Kinley, director of the economic seminar, under whose leadership the monograph was written. Special mention may be made of the caution in drawing conclusions from data and the absence of the catch-phrases made so familiar by agitators for land reform, who are not familiar with present facts of land tenure and have no knowledge of what is involved in their proposals.

This work ranks among the best of the monographic studies on the subject of land tenure in the United States. No startling results are reached, but no one should attempt to deal with the subject in a practical or scientific way without reading carefully this work.

It confirms the impression of the spread of tenancy and brings before us clearly some of the causes. One is high land values, making it possible for the land to support two classes of men—farmers and tenants. Probably it will generally be found that there is some connection in the United States between price of land and tenancy; but differences will be found traceable to the use made of the land. What is true of wheat and corn land will not hold to the same degree for dairy and fruit farms. Dr. Stewart also suggests that opportunities for hunting and fishing may exercise an influence in keeping the owners on the land. But we must always ask what tenancy means before we take any drastic position with respect to it. Sometimes it means a very good and desirable

thing and a certain amount of it will be included in any ideal system of land tenure. How often is tenancy merely a family affair, whereby the older generation affords opportunities to the younger generation! Dr. Stewart says, "When farmers retire, they usually rent their farms either to a relative by birth or marriage or to a trusted farmhand" (p. 21). This conclusion is borne out by investigations conducted by Professor K. L. Hatch, of the University of Wisconsin, who estimates that in Iowa county of Wisconsin over one half of the tenants belong to the families of the owners.

We are not warranted, however, by Dr. Stewart's monograph or by other facts known in thinking that tenancy as it exists in the United States gives no occasion for alarm. It is spreading and in many cases it produces serious evils, especially of a political and social kind. Schools and churches, for example, are not likely to be well supported by tenants who do not have a permanent stake in a community. Undoubtedly land is not likely to be so well cultivated by tenants, but Dr. Stewart is not able to give us many facts bearing on this subject. He points out the need of cost accounting studies to show the relative profitableness of various forms of tenure.

One question which deserves further attention is this: To what extent is the increase in tenancy due merely to increasing age of the country? As a new country grows older, those who have settled it likewise become older and must make way for the oncoming generation. It would be well to picture ideals showing to what extent tenancy ought to increase under wholesome and desirable conditions as the country grows older; and then to contrast the actual with the ideal.

There is little to criticise in Dr. Stewart's monograph. It is not a complete investigation and does not profess to be, and it is very cheap to criticise a writer for not doing what he did not undertake to do. The reviewer, however, thinks that the title is a misnomer and misleading. The author does not discuss land tenure in the United States with especial reference to Illinois, but he does discuss land tenure in Illinois and prefaces it with one chapter dealing with the United States as a whole. The author mentions also the fact that his plan is to carry on more field investigations than have as yet been conducted. These are desirable and urgently needed to bring out the significance of the statistical data revealed by the census.

In conclusion the reviewer expresses the hope that Dr. Stewart may continue the work which he has so well begun. The question of landed property is the great question of the twentieth century and an immense amount of work must be done by workers like Dr. Stewart before we shall be in a position to deal satisfactorily with the questions of land tenure as they become more and more pressing.

RICHARD T. ELY.

University of Wisconsin.

Meat Situation in the United States. Part V. Methods and Cost of Marketing Live Stock and Meats. Report No. 113, Contribution from the Office of Markets and Rural Organization, CHARLES J. BRAND, Chief. (Washington: United States Department of Agriculture, Office of the Secretary. 1916. Pp. 98.)

Early in 1914, a committee of seven investigators, headed by Dr. B. F. Galloway, then Assistant Secretary of Agriculture, was appointed by the Secretary of Agriculture to study the economics of the meat situation. The committee made some investigations but did not report formally. At their suggestion, however, the United States Department of Agriculture undertook the preparation of five independent reports on different phases of the meat problem. These reports have been issued under the general title of the *Meat Situation* in five separate bulletins or parts.

Part I deals with the *Statistics of Live Stock, Meat Production and Consumption, Prices, and International Trade . . .*; part II, with *Live Stock Production in the Eleven Far Western Range States*; part III, with *Methods and Cost of Growing Beef Cattle in the Corn Belt . . .*; part IV, with *Utilization and Efficiency of Available American Feced Stuffs*; part V, with *Methods and Cost of Marketing Live Stock and Meats*. Each of these parts was written by specialists of the United States Department of Agriculture and each report is complete in itself.

Part V purports to deal only with those phases of livestock and meat marketing "which bear most directly upon the economic aspects of the meat situation." It is in no wise a comprehensive or conclusive treatise although it does follow more or less closely for about ninety pages the devious trails of different kinds of livestock from grower to consumer. Most of the definite figures used were taken from various familiar sources.

The bulletin deals principally with three topics: (1) the relative extent and importance of different marketing methods, (2) factors in the cost of marketing and distribution, and (3) relative margins in marketing and distribution. The principal original contributions of the authors are two; first, an estimate by states of the percentage of livestock marketed by different methods. This report is based on estimates made by a variety of persons, many of them agents of the department. In general, they indicate that "one-half of the beef cattle, two-thirds of the hogs, and four-fifths of the sheep and lambs marketed pass through the large central markets; one-third of the beef cattle, one-twelfth of the hogs, and one-eighth of the sheep and lambs are sold for local slaughter." While the data by states have value they are not sufficiently accurate for the careful investigator and few conclusions can be drawn from them.

The other original contribution consists of detailed accounts of the cost of marketing, slaughtering, and retailing meat, and selling the by-products of 9 lots of cattle marketed through central markets, and 5 lots of cattle (5 animals) marketed locally. The cattle are followed from the ranch through the packing plant and at least one animal in each lot was traced through the retailer. In some instances the actual figures were obtained; in others it was necessary to take approximate figures from the retailers. These accounts are the most valuable part of the study.

The section on market prices and supply is the least satisfactory part of the report. The price charts are numerous but in some instances are not clear and are over-crowded with data. The lines are untraceable and the labels unintelligible. The description and interpretation of the data are unsatisfactory, both in content and construction, and the fifty-seven varieties of punctuation which one finds in the legends beneath the charts are irritating as well as confusing. A case in point is Plate XII, a chart of sheep and lamb prices which shows a "five-year average" price line far above the price of every individual year. No explanation of this remarkable phenomenon is made. The label attached is unintelligible.

The monograph has value as a preliminary statement. It suffers from too many authors, too few original data, and too hasty compilation.

ALEXANDER E. CANCE.

Massachusetts Agricultural College.

The Cost of Living on Minnesota Farms, 1905-1914. By F. W. PECK. (St. Paul, Minn.: University of Minnesota Agricultural Experiment Station. 1916. Pp. 31.)

Another work has been added to the small but growing number of studies which deal with actual living conditions among our people. Mr. Peck's inquiry into the cost of living on Minnesota farms supplements admirably the studies made by Chapin, More, Streightoff, and others into the living conditions among working people. The average annual expenditure of \$816.13 for food, housekeeping, furniture, fuel, and rent which is found by our investigator to be the cost of these things to the farmer's family dissipates entirely the current notion that the country is a peculiarly cheap place in which to live.

The cost of living upon Minnesota farms is ascertained by the cost accounting method of inquiry rather than by the method of a mere questionnaire, and the semblance to reality of the facts presented is much improved as a result. Field men are sent out from the University of Minnesota who record at the farm house the expenses which are incurred by the farmer's family as living expenses. The families under observation in this way are unfortunately few—only twenty-two in all; but the period during which the observations are carried on is a long one—some eight or nine years—extending from 1904 to 1913. The families are average-sized families of four or five, and every living expense of each family is tabulated, save only those for clothing and for amusements and culture.

The study, in addition to its main purpose, throws light upon at least two great problems concerning farm finance. First, it clears up the question of the farmer's income. Farm management surveys of which a great number have been made in recent years have sought invariably for two things: (1) to ascertain the style of farming carried on, and (2) whether it is profitable or not. The farm management analysis which may be said to be the standardized one in this country (*i.e.*, used universally by the United States Department of Agriculture and the various state experiment stations) seeks as its measure of the successfulness of the management of a farm, the so-called farmer's "labor income." No attempt is made in this analysis, however, to evaluate the farmer's cost of living; so that the rather shabby labor incomes which are represented by these surveys must always be understood to be an income which is in addition to the farmer's living. The present

study, by showing how much it costs the farmer to live, gives data which, when added to the farmer's labor income, show the entire earnings of the farm business.

Second, it clears up the myth which still prevails in the minds of vast numbers of people that the farm family subsists directly from the farm on which it lives. Both in respect to what was spent for food and also with regard to the total living costs, the farm is shown by this bulletin to have furnished directly a smaller amount than was purchased. Of the total cost of living of the farm family, the farm indeed furnishes only 22.1 per cent, while of the food alone which is used, the percentage is slightly more than twice as much. The investigator observes that to the extent only that farm products are cheaper to the farmer through not having had to undergo distribution through the middlemen system it may be said that living expenses are lower upon the farm than elsewhere.

The methodology of the investigations has great practical significance also because, as the author says, "the facts [farm living costs] have never been known . . . as the cost of farm items could not be estimated." The bulletin explains, however, that they can be estimated; and, while the plan followed of valuing the farm produce which had no local market—garden produce, fruit, etc., by its costs of production seems cumbersome, nevertheless, it is shown that it can be done. The price of purchased commodities and household labor presented no difficulties, but the appraisal of rent and furniture equipment was not so easy. Indeed, the rent expense was made an arbitrary charge, a flat interest rate being used upon the average value of the houses.

As is frequently the case in every field of affairs a new and genuine truth may prove to be the open sesame to a vast number of related problems. So it is claimed for this study that it will assist in determining "the annual expenditures on farms," "equitable wages for farm help," "the total cost of man labor," and "the gross income in farming as a business."

WILBUR O. HEDRICK.

Michigan Agricultural College.

Marketing and Farm Credits. A Collection of Papers and Documents Read at the Fourth Annual Sessions of the National Conference on Marketing and Farm Credits, Chicago, Dec. 4-9, 1916. (Madison, Wis.: Charles W. Holman, Secretary, 340 Washington Bldg. 1917. Pp. 546. \$2.00.)

This is the best of the three volumes in this up-to-the-minute

series on agricultural economics. All viewpoints are represented in this volume, both as to principles and as to programs. Main cleavages of opinion arise over two questions, (1) price fixing and (2) government help versus self help. The formal papers (and to a limited extent stenographic notes on the discussions) are grouped under four main heads: Credit, Land Settlement, Marketing, and Organization of Agriculture.

Credit is discussed by five speakers, the chief topic being the Federal Farm Loan act. A representative of the Farm Loan Board analyzes this act and considers it "coöperative credit," although it is strictly a first mortgage land credit law. The success of actual coöperative credit, as worked out in North Carolina, is set forth by William R. Camp. Alphonse Desjardins, father of coöperative credit in Canada, expresses the belief that the United States will discover and remedy the defects in the new Farm Loan act. "I do believe most strenuously," he says, "in the great principle of self-help, not having any faith in any state-aid system, believing as I do, that the latter is more demoralizing than educative for the masses."

The land settlement problem receives the ablest treatment of any subject in the volume. Professor Mead brings to the discussion of this topic his long years of experience in Australia, and his more recent experience as member of the California Commission on Land Colonization and Rural Credits. Land settlement, he says, is a public question, not a private question—a question of the "home-seeker" versus the "homesucker." Professor E. Dana Durand shows the importance of colony settlements in the peat lands and logged-off lands of the North. He favors state action to the extent of clearing or draining the land, of granting credit to the extent of cost of improvements, of selecting and developing first the best suited lands, and of sale of state lands only to bona fide settlers. Max Loeb, of Chicago, proposes a land certification scheme whereby the buyer would be truly informed as to his purchase, a sort of "pure-food law" applied to land purchase. Hector MacPherson, of Oregon, condemns the promoters and speculators who exploit and rob homeseekers. Frederic C. Howe proposes as the first solution of the land question the single tax. As an alternative he proposes government colonization. The speakers on this topic show that the situation as concerns land ownership and settlement is critical. And we have no land policy.

One hundred and fourteen pages are given to the discussion of

the live-stock marketing problem. And not one packer is heard from. The growers of Texas, Colorado, Wyoming have their day in court. All is not well with the live-stock industry, according to these speakers, and the blame is laid at the doors of the great packing houses. More information is demanded by the speakers before any program of action is chosen. An investigation of the live-stock industry by the Federal Trade Commission is urged. Coöperative packing houses are now on trial in the United States. F. A. Bingham, vice-president of the farmers coöperative packing plant at Rockford, Illinois, discusses that plant. "With regard to the marketing of the product," says he, "there is nothing to it." This house had just bought its first carload of stock. Charles W. Holman sets forth in great detail the history and failure of the farmers coöperative packing plant at LaCrosse, Wisconsin. Other phases of marketing treated are perishable farm products, cheese and whole milk. The by-laws of the National Milk Producers Federation are given in full.

Price fixing by law, causes of fluctuations of prices of grain, marketing of export wheat, factors that govern grain prices, are some of the topics very ably covered in the paper of Julius H. Barnes. Price fixing is further discussed by J. N. McBride, state market director for Michigan. He favors "transference of price making from the buyer to the producer," and contends that this "is the rule in other industries." The Michigan bean growers have for the past two years fixed a minimum price, but the market price has kept above this minimum. •

Kenyon L. Butterfield outlines a basis for a national agricultural organization, springing from purely voluntary coöperative movements among farmers, with the local community as the unit of organization. The movement must be primarily in the hands of the farmers themselves. They can federate with county and state federations or with a national organization. This would furnish clearing houses to provide a program and a policy.

Assistant Secretary of Agriculture, Carl S. Vrooman, speaks eloquently of the farmers' fight "with the usurer, the fake middleman, the transportation shark, and the other business pests that feed off the profits of the farmers' business dealings."

The volume contains the provisional constitution and by-laws of the National Organization Society of America and also a full copy of all resolutions adopted by the conference. The meaning of the conference and the work of the N. A. O. S. are discussed by President Frank L. McVey.

The volume is well edited. Its mechanical make-up is excellent. All students in the field of agricultural economics will find this work one which they can ill afford to be without. Correct and sane agricultural policy is foreshadowed in this volume.

JAMES E. BOYLE.

North Dakota Experiment Station.

NEW BOOKS

- BILLINGS, G. A. *Seasonal distribution of farm labor in Chester county, Pennsylvania.* Contribution from the Office of Farm Management. United States Department of Agriculture, Bulletin 528. (Washington: Superintendent of Documents. 1917. Pp. 29. 10c.)
- ELTZBACHER, P., editor. *Germany's food, can it last?* (London: Univ. of London Press. 1917. Pp. 256. 2s.)
- HARRIS, F. S. and ELLISON, A. D. *Dry-farming in Utah.* (Logan: Experiment Station. 1916. Pp. 35.)
- HOPKINS, C. G. *Why Illinois produces only half a crop.* University of Illinois Agricultural Experiment Station. Circular no. 193. (Urbana: 1917. Pp. 16.)
- JOHNSTON, J. *Food production in France in time of war. Supplementary report to the trustees of the Albert Kahn travelling fellowship.* (Dublin: Maunsell & Co. 1916. Pp. 32. 6d.)
- LUBIN, D. *National Chamber of Agriculture: a war measure mobilising our agricultural resources. Facts and deductions showing the need for the passage of Senate Bill 5973, 64 Cong., 1 Sess.* (Washington: Superintendent of Documents. 1917. Pp. 8.)
- MCLEISH, J. *A general summary of the mineral production of Canada during the calendar year, 1915.* (Ottawa: Department of Mines, Mines Branch. 1916. Pp. 45.)
- MCWEENEY, E. F. *The food supply in New England.* (Boston: New England Federation for Rural Progress. 1917. Pp. 14.)
- MILLAR, A. *Wheat and its products; a brief account of the principal cereal: where it is grown, and the modern method of producing wheaten flour.* (New York: Pitman. 1916. Pp. 134. 85c.)
- MYRICK, H. *Agriculture and preparedness; an address to the Congress of Constructive Patriotism held under the auspices of the National Security League at Washington, D. C., 27 January, 1917.* (New York: Judd. 1917. Pp. 67. 50c.)
- PARKER, H. N. *City milk supply.* (New York: McGraw-Hill. 1917. Pp. xi, 493. \$5.)
- PONSONBY, T. B. *Agricultural labour. Standardisation as a means of improving the condition of rural employment.* (Dublin: Co-operative Reference Library. 1917. Pp. 27. 6d.)

- SACERDOTE, C. *La guerra e la crisi del carbone in Italia.* (Torino: Bocca. 1916.)
- SMITH, H. H. *The high price of sugar and how to reduce it.* (London: Bale, Sons and Danielsson. 1916. Pp. 54. 1s.)
- STRUTT, E. G., and others. *British agriculture. The nation's opportunity. Being the minority report of the Departmental Committee on the Employment of Sailors and Soldiers on the Land.* (London: Murray. 1917. Pp. xi, 168. 6d.)
- WILSON, A. W. G. *Report on the production of spelter in Canada, 1916.* (Ottawa: Department of Mines, Mines Branch. 1916. Pp. 60.)
- The coal-fields and coal industry of eastern Canada. A general survey and description.* Bulletin no. 14. (Ottawa: Department of Mines, Mines Branch. 1916. Pp. 67.)
- List of references on the milk industry.* (Washington: Library of Congress. 1917. Pp. 12.)
- Sixth annual report by the Director of the Bureau of Mines to the Secretary of the Interior, for the fiscal year ended June 30, 1916.* (Washington: Superintendent of Documents. 1916. Pp. 98.)
- Summary report of the Mines Branch of the Department of Mines for the calendar year ending December 31, 1915.* (Ottawa: Dept. Mines. 1916. Pp. 205.)

Manufacturing Industries

NEW BOOKS

- ROLPH, G. M. *Something about sugar; its history, growth, manufacture and distribution.* (San Francisco: J. J. Newbegin. 1917. Pp. xix, 341.)
- VAN KLEECK, M. *A seasonal industry; a study of the millinery trade in New York.* (New York: Russell Sage Foundation. 1917. Pp. 276. \$1.50.)

Transportation and Communication

NEW BOOKS

- ACWORTH, W. M. *Historical sketch of government ownership of railroads in foreign countries.* Presented to the Joint Committee of Congress on Interstate Commerce. (Washington: Superintendent of Documents. 1917. Pp. 63.)
- BLAKE, H. W. and JACKSON, W. *Electric railway transportation.* (New York: McGraw-Hill. 1917. Pp. 487. \$5.)
- CLAPP, E. J. *Railway traffic.* (New York: Alexander Hamilton Institute. 1917. Pp. xv, 309.)

- CRAMMOND, E. *The British shipping industry*. (London: Constable. 1917. Pp. 67. 1s.)
- DUNN, S. O. *Can the railway problem be solved?* (Chicago: Railway Age Gazette. 1917. Pp. 16.)
- HUNGERFORD, E. *The railroad problem*. (Chicago: McClurg. 1917. Pp. 265. \$1.50.)
- JONES, G. M. *Pilotage in the United States. Summary of the laws and regulations relating to pilotage in the several states*. Bureau of Foreign and Domestic Commerce. Special Agents Series, no. 136. (Washington: Superintendent of Documents. 1917. Pp. 101.)
- JOHNSON, A. N. *Highway laws of the United States. A topical discussion*. (New York: Bureau of Municipal Research. 1917. Pp. 163. \$1.)
- A bibliography¹ is given in the author's introduction.
- WARNE, F. K., compiler. *Before the Interstate Commerce Commission: I. & S. docket no. 774, Lake cargo coal rates, dockets no. 8725, 8598, bituminous coal to Central Freight Association territory and dockets no. 7662, 6951, 7089, 7371, 7667, 7668, 7669 and 7422; supplementary exhibits, revenues, expenses, income and surplus of sixteen bituminous coal roads, 1908-1916; exhibits by the Pittsburgh Coal Operators' Association*. (Washington: F. K. Warne, 421 Southern Bldg. 1917. \$10.)
- Government ownership of railways*. (Chapel Hill, N. C.: Univ. North Carolina. 1917. Pp. 92.)
- Highway improvement in Oregon. Papers presented at a conference for furthering the adoption of a highway code for Oregon, held at Portland, Jan. 3-4, 1917*. (Eugene, Oregon: The Commonwealth Review of the University of Oregon, vol. I, no. 4; vol. II, no. 1. Pp. 363-482.)
- List of references on valuation of steam railways*. (Chicago: Am. Ry. Engg. Assoc. 1917. Pp. 154. \$1.)
- Public mileage and revenues in the southern states, 1914*. United States Department of Agriculture, bulletin no. 387. (Washington: Superintendent of Documents. 1917. Pp. 52, lxxi.)
- Railway nationalization and the average citizen*. (Toronto: McClelland, Goodchild, & Stewart. 1917.)
- Railway statistics of the United States of America for the year ending June 30, 1916, compared with the official reports for 1915 and recent statistics of foreign railways*. (Chicago: Bureau of Railway News and Statistics. 1917.)
- The traffic library: Railway traffic departments, organizations and systems; Application of tariffs, within and from the Southern classification territory; Special freight services, allowances, and privileges, parts 1, 2, 3*. (Chicago: Am. Commerce Assoc. 1916. Pp. xxi, 427; xviii, 298; 3 vols.)

Trade, Commerce, and Commercial Crises

Marketing Methods and Salesmanship. By RALPH STARR BUTLER, HERBERT F. DEBOWER, JOHN G. JONES. Modern Business Series, Vol. III. (New York: Alexander Hamilton Institute. 1916. Pp. xxii, 555.)

Marketing Methods. By RALPH STARR BUTLER. Modern Business Series, Vol. V. (New York: Alexander Hamilton Institute. 1917. Pp. xxi, 346.)

Salesmanship and Sales Management. By JOHN C. JONES. Modern Business Series, Vol. VII. (New York: Alexander Hamilton Institute. 1917. Pp. xvii, 358.)

The reviewer has on his desk the 1911, 1914, 1916, and 1917 editions of this part of the Modern Business Series. There may have been other editions within these seven years. Comparing the editions at hand the evolution of the present volumes appears to be as follows: Volume IX of the 1911 edition consisted of "three separate treatises bound in one": (a) on advertising, (b) on selling and buying, and (c) on credits; (a) and (b) were written by Galloway and (b) by Butler; credits did not receive half as much space as either of the other two. The reviewer's copies of the 1914 edition are bound separately: "Advertising" was completely rewritten by Messrs. Tipper and Hotchkiss and made very much better; "Selling and Buying" was rechristened "Marketing Methods," a much better name and one that it has retained to date; and a new volume was created, "Salesmanship," which embraced the theory and practice of sales and the sales organization; this was written by DeBower and Jones; "Credits" was rewritten by Wahlstad. Volume III of the 1916 edition, "Marketing Methods and Salesmanship" is by the same authors (Butler, DeBower, Jones) and consists of the 1914 volumes bound together. In 1917 "Marketing Methods" by Butler was bound as volume V and "Salesmanship and Sales Management" by Jones was bound as volume VII.

The following differences between the 1916 and 1917 editions may be noted:

1. The editors and authors have sought to keep the texts abreast of the times where important changes of fact have occurred. For instance, the prominent role in public and trade discussions played recently by "price maintenance" would justify a more extensive treatment of that subject than was formerly given. Chapter XIII (volume III) of the 1916 edition on "Protecting

the Manufacturer's Goodwill" has been developed into two chapters in 1917, the second taking the heading "The Case for Price Maintenance." As far as the contents and manner of treatment are concerned it does not appear why the chapter was divided: there is quite as much argument *for* price maintenance in the first chapter as in the second. The sum total of additional information on this subject is a mere pittance. In the statement of the methods of price maintenance it adds a third method, by 'gentleman's agreement'; this is probably well taken, for the recent court decisions adverse to the other methods will likely bring this method more and more to the front. In this discussion the author refuses to state his position on the question of price maintenance, nor does he present the recent history of price maintenance legislation and court action; it is also regrettable that he does not give actual illustrations of the methods of price maintenance and how they work. The only other place where changes of fact have occasioned changes of treatment is with respect to chain and coöperative stores: the chain stores system and coöperative and jobbing enterprises are fast rising into prominence. Chapter IV (volume III, 1916) on the "Chain Store" contained somewhat extraneous sections (Nos. 60-66) on coöperative stores; in the 1917 edition these sections are carried forward and put into a new chapter, XIV (volume V), on "Substitutes for the Middleman." This chapter discusses (1) substitutes for the ordinary retail stores—(a) coöperative stores and buying clubs as organized by the consumers and (b) chain stores and direct consumer sales as used by manufacturers; and (2) substitutes for the ordinary jobber—(a) retail buying exchanges, (b) coöperative wholesale houses, and (c) co-operative retail chains. This arrangement is a great improvement over the 1916 plan and is a fairly good discussion of the subject.

2. Comparing the section heads one would get the impression that considerable data had been added; but upon examination it is seen that the apparently new sections are, for the most part, only divisions of former sections with titles prefixed (*e.g.*, *cf.* pp. 35-38, 1916 and pp. 63-68, 1917, volume V) and the apparently new chapters are divisions of former chapters (*e.g.*, *cf.* chapter VII, 1916 and chapters V and VI, 1917, and *cf.* chapter IX, 1916 and chapters VIII and IX, 1917). Here and there through the text a small paragraph is added but it adds little or nothing to the value of the chapter.

3. As to changes in the method of presentation, logic, or style,

the following may be noted: some sections are split up and the parts named, others are combined; many titles of sections are improved, and the sections are numbered by chapters whereas they were formerly numbered continuously through the book. There are many changes of phraseology but very few of them issue in greater clarity, precision, or better grammar. The editors have wisely dropped some irrelevant parts, as chapters IV and V (1916), on "The Training of Retail Salesmen," which were irrelevant and illogical interpolations in the exposition of the manufacturer's or jobber's sales organization. At the close of the volumes of the 1916 edition were found several pages of questions, arranged and numbered to correspond with chapters and sections, each question bringing out the chief point in its particular section; in the 1917 edition the questions are grouped at the close of each chapter in fine type, are unnumbered, are fewer in number, and are of a better character since they are thought-inducing rather than expository; in each of these respects the reviewer believes the questions are improved. On the whole, the number and extent of changes are much greater in volume V than in volume VII.

"Marketing Methods" (volume V, 1917) is devoted to "the technique of advertising and the technique of salesmanship—and to those considerations that must receive attention before either salesmanship or advertising is started on its mission of influencing the market"; it is written from the manufacturer's point of view. After stating the general "chain of distribution" it treats: (1) the retail outlets—general, specialty, chain, and mail-order stores; (2) the jobber's functions and problems such as private brands, exclusive agencies, price maintenance, substitutes for jobbers, etc.; and (3) the development of a selling campaign through jobbers and retailers, or through retailers, or direct to consumers.

Volume VII (1917), "Salesmanship and Sales Management," aims to present the "fundamental principles underlying the whole field of personal salesmanship, as revealed in the experience of a large number of successful salesmen" and "to formulate the principles underlying successful salesmanagement in all its phases." In the first part the selling process is carefully detailed through the preliminaries, the interview, and the agreement; there is a study of the "human appeals that sell," of the qualities and character of the salesman, of his duties, and of his relations to his house and customers. In the second part are considered the qualifications and duties of the salesmanager, the selection of salesmen, their

equipment and compensation; and it closes with chapters on the methods by which sales are reported and by which salesmen are stimulated to high efficiency.

Together these books make the best existing treatment of their field; in fact they are quite alone in their field, and the importance of this field is being recognized more and more; as "schools of commerce" are instituted in our universities the need of textbooks for courses in these lines is being acutely felt. The reviewer has used the 1914 and 1916 editions as texts and his conclusions, seconded by many of his pupils, are that the texts are sketchy and artificial for use by upper college classes; they are written for too popular an audience and not in the scientific strain and depth which fit college men; there is a crying need for genuine college texts in this field. The texts are also written from a purely business point of view; they are divorced from the economic principles developed by the earlier courses in the elements of economics (instance volume V, pp. 276-277 on prices); there is need of texts which correlate economic concepts and doctrines with practical business economics; texts so built will find a more warrantable berth in economics courses. Too many of the illustrations are by name only; to say, by way of illustration, that John Doe and Company practiced price maintenance by the "contracts" method is practically useless unless sufficient details are given to make the reader comprehend the John Doe practices with some definiteness; such illustration could be made to lend exceptional life and interest to the book by such fuller statement. Finally, the reviewer believes that, while the texts aim to be expository only, this exposition would be much improved if the historical side were given more attention; if the genesis of certain business practices, with their whys and hows, were delineated.

RAY B. WESTERFIELD.

Yale University.

NEW BOOKS

CAPORALI, D. *Istituzioni di diritto commerciale ad uso delle scuole di studi applicati al commercio.* (Torino: Bocca. 1917.)

HARTLEY, E. F. *Study of cartage costs in city of Washington.* (Washington: Superintendent of Documents. 1917. Pp. 14. 5c.)

KITSON, A. *Trade fallacies. A criticism of existing methods and suggestions for a reform towards national prosperity.* (London: King. 1917. 5s.)

Analysis of the present foreign trade of the United States. (Boston, Mass.: Directors of the Port of Boston. 1917. Pp. 19.)

List of references on embargoes. (Washington: Library of Congress. 1917. Pp. 44.)

Official proceedings of the fourth national foreign trade convention held at Pittsburgh, Jan. 25-27, 1917. (New York: National Foreign Trade Council. 1917. Pp. 600. \$2.)

Report to the American manufacturers export association by the American Industrial Commission to France, September-October, 1916. (New York: American Industrial Commission to France. 1917. Pp. 256. \$5.)

First annual report on markets and marketing for the year ending December 1, 1916. (San Francisco: State Market Director. 1916. Pp. 110.)

Frank Waterhouse and Company's Pacific ports, a commercial geography, commercial dictionary, transportation guide and marine manual of the Pacific Ocean, with full information for importers and exporters. Third edition. (Seattle: Terminal Pub. Co. 1917. Pp. 352. \$3.)

Accounting, Business Methods, Investments, and the Exchanges

The Administration of Industrial Enterprises with Special Reference to Factory Practice. By EDWARD D. JONES. (New York: Longmans, Green and Company. 1916. Pp. vi, 442. \$2.00.)

"The purpose of this work," as stated in the preface, "is to present what may be called first-class practice in the administration of industrial enterprises," or, in other words, "to trace the application of the scientific method in industry. . . ." The major topics dealt with are physical equipment, administrative organization and methods, the adjustment of the relations of employment, the buying and selling side of manufacturing. The proportions of the work are not perfect. Too much space is devoted to the highly technical subject of "layout of a manufacturing plant" and not enough to modern aids to an enlightened administration. The treatment of cost accounting is far too meager and there is nothing at all on managerial statistics and the graphical presentation of facts. Nevertheless, the ground in general is covered with judgment and as thoroughly as a work of moderate size addressed to the general reader would permit. At the end of each chapter is a well-selected bibliography of special works for the benefit of those who wish to delve more deeply into particular points of interest.

The strong feature of the book as a whole is that, though rich in information, it is no mere collection of information. With breadth of outlook and freshness of style the author illumines his statements of industrial procedure; there is interpretation, and a constructive setting forth of "the new method and the new spirit." Especially happy is the author's discussion of those aspects of the subject most nearly related to economics, as that of the general wage situation (pp. 226-227) and his answers (p. 239 and following) to the objections to scientific methods in industry. He goes straight to the point when he says, "The true ground of opposition of organized labor to scientific management is its aim of paying men according to individual performance." His treatment of purchasing, selling, credit, and related topics is excellent.

Where the author most falls into error is in handling some of the technical features of scientific management—a subject which is new, and upon which misinformation abounds. He is, for example, unfortunate in his handling of "time study." It is not correct that "the first step in time study consists in the accurate measurement . . . of the times required for the performance of the elementary human movements of which any job is composed. Time study does not concern itself with machine speeds; . . ." (p. 233). On the contrary, the first step before timing the movements of the operator is to thoroughly standardize the job, and a leading feature of that is the establishment of standard machine speeds. Again, the time study "observation sheet" reproduced on page 235 is misleading. In good time study practice it is customary to reject the lowest recorded time, if divergent, of a series of observations of a detail operation and not to treat it as a "minimum time." The footing of this "sheet" presents most unusual, hybrid practice. Where time studies are made at all and a proper "time allowed" established, it is not customary to have premiums begin when the work is done "in time and 2/3." Much of the discussion of The Newer Wage Systems in chapter 14 is uncritical.

To slip up in such matters is not, of course, a material shortcoming. In all essentials the book is unquestionably sound, and abounds in critical comments of value. One wishes there were more of that sort of interpretation in which the author is at his best. This book is to be highly recommended to those who do not know much about industrial practice and wish to know.

New Haven, Connecticut.

CHARLES W. MIXTER.

Railroad Valuation. By HOMER BEWS VANDERBLUE. Hart, Schaffner & Marx Prize Essays, XXIII. (Boston: Houghton Mifflin Company. 1917. Pp. xiii, 222. \$1.50.)

There seems to be no end of valuation literature. Professor Vanderblue's book, however, is a worthy contribution. Its greatest usefulness lies in the collection and classification of the many confusing theories, decisions, and opinions that have accumulated in the comparatively short time since rate reasonableness and fair value were first linked together.

Professor Vanderblue treats the subject both as "a study in the economics of the distribution of income" and "in the economics of railroads." He does not, however, define either of these terms. Moreover, the frequent use of cant economic phrases, even with a view to stamping the work as scientific, limits the utility of the volume. A practical problem is not brought nearer to solution by frequent abbreviation of the argument through the use of the terminology peculiar to the field of the science.

It is not essential for the purpose of this review to consider in detail the author's discussion of all the topics of valuation. His historical summary of the development of the legal doctrines of "fair value" is very good, but nothing is offered which might clear up the muddle. Certainly it is difficult to harmonize economic theories and legal *dicta*. The suggestion to substitute "unimpaired investment" for "cost-of-reproduction" as a basis of fair value is like calling six of one, half a dozen of another. Moreover, the term "unimpaired investment" may be interpreted variously. It may refer to the upkeep and maintenance of the physical elements of the property. According to this view it does not differ essentially from the idea of reproduction cost, and the substitution of a pet economic phrase for a term that has already received judicial sanction merely intensifies the curse of Babel. The multiplication of definitions is the most obstructive feature in the solution of valuation problems.

A more common interpretation of unimpaired investment relates to earning power. Investment cannot be considered separately from earning power. It has no direct or necessary reference to physical property. To borrow an economic expression, investment represents the application of a fund to productive use. It is the force which (in the language of Professor Irving Fisher) determines the flow of the "capital stream." A railroad may maintain its physical corpus in a brand new condition, but if it ceases to

earn revenue, the investment is "impaired" and perhaps eliminated. Thus the "capital goods" may remain visible and intact, but the "capital stream" has evaporated.

Professor Vanderblue's discussion of the intangible elements of fair value is confined largely to a review and digest of judicial opinions and economic theories. Very little is added which might assist in the application of the dollar mark to intangibles, the author admitting that "no usable solution appears possible" and that "the conjectural nature of the valuation of tangible assets is multiplied many fold" in an appraisal of "going value" (p. 187). From the economic viewpoint, he criticises the prevailing distinction between "good-will" and "going value." The courts have come to interpret "going value" as the accumulations of deficiencies in a "fair return" arising from the necessity of creating and developing business. This is the so-called "Wisconsin method" of gauging "going value." It is really the application of the economic doctrine of sacrifice or the cost basis of value. Its underlying principle is the same as that which distinguishes investment expenditure from revenue expenditure. The distinction arises from the natural laws of trade, and volumes of economic theorizing cannot alter these actual conditions of facts.

Economic principles, in the long run, tend to harmonize with business practice and legal doctrines; otherwise, the science would become entirely metaphysical. Accordingly, the author, in trying to solve a practical business problem, such as rate regulation, may be as badly off as a blind man in a dark room looking for a black cat that is not there. Certainly, in the actual work of valuation there is much groping in the dark as to correct economic doctrines. The best evidence of this is Mr. Vanderblue's numerous citations of diverse opinions and theories. Conflicting ideas are expressed by the economists, the engineers, and the lawyers. The experts in the field are continually quarrelling among themselves and with each other. Many of the arguments presented at the formal hearings before the Interstate Commerce Commission (which are fully reviewed throughout the pages of Mr. Vanderblue's book) resemble scholastic quibbles.

Railroad valuation is not the most pressing problem (as stated by the author's publishers) but it is undoubtedly the most vexatious problem before the Interstate Commerce Commission. Mr. Vanderblue's scientific study is a masterful resumé of varied, un-

digested, unassimilated, and discordant views and data, but it does not clear the atmosphere nor lift the smoke of battle.

A. M. SAKOLSKI.

Valuation, Depreciation and the Rate-Base. By CARL EWALD GRUNSKY and CARL EWALD GRUNSKY, JR. (New York: John Wiley & Sons, Inc. 1917. Pp. viii, 387. \$4.00.)

Public Utility Rates. A Discussion of the Principles and Practice Underlying Charges for Water, Gas, Electricity, Communication and Transportation Services. By HARRY BARKER. (New York: McGraw-Hill Book Company, Ltd. 1917. Pp. xiv, 387. \$4.00.)

These two books appeared almost simultaneously, both by engineers with extensive practical experience with rate control. Their chief significance is that they bring out the chaotic conditions of regulation, the uncertainties and indefinitenesses of procedure after a generation of discussion of principles and policies, and after fifteen years of attempts at regulation. Nothing is more needed, both for the protection of the public and the welfare of the business, than a definite and sensible policy, which actually establishes control of return on investment, states the terms at which investors place their capital in the public service, and provides for desirable extension of service. Both books should contribute substantially toward the realization of such a policy.

The Grunskys' book is less a comprehensive and systematic discussion of valuation and rate making in accordance with present procedure than the presentation of particular views based on personal experience and study; and many suggestions that deserve special consideration are offered. There is commendable omission of numerous elementary commonplaces, but unfortunately particular points are uselessly repeated over and over and, in general, material, much of it irrelevant, is presented in a very disorganized fashion.

The plan may be briefly summarized as follows: Take as the rate base "the reasonable and proper investment or original cost new, including a proper allowance for the cost of establishing and developing the business" (p. 30); make no deduction for depreciation, nor an allowance for appreciation, and, in some cases at least, make a deduction for public contribution to the investment; then, in fixing rates, first allow just interest on the investment, then add to the rate of return for the volume of business

and give the investors a share in the general prosperity of the community.

As to the rate base, the authors present really two bases of valuation, although it is not clear that they are aware of the fact and realize its significance: (1) "the legitimate investment necessary to establish the business" (p. 155), and (2) the cost of constructing the property. The first looks upon historical fact and represents investors' direct sacrifice; the second looks to the present and makes an appraisal of the existing property. Apparently the authors have in mind the first and offer the second as a mere alternative statement. But the two cannot be used thus; they do not even represent equivalent quantities. I should agree that the investors' direct sacrifice is the most reasonable rate base, which, of course, would not be subject to depreciation or appreciation, for it would be a historical quantity not subject to modification. But it cannot be used, because in the ordinary rate case the legitimate actual just investment cannot be determined. The problem then is to find the most nearly equivalent *appraisal of present property*. And this, under normal circumstances, would not be the gross actual cost new, as presented by the authors, but this amount diminished by depreciation.¹

A chapter is devoted to showing that the actual life of property units in service does not agree with the probable life assumed in the depreciation allowance; some units are retired much earlier while others serve much longer; if then, depreciation charges are made according to any one of the standard formulas, the accumulation of funds will not agree with the replacement requirements. This is all true; but what seems to be given as the conclusion does not follow, that in place of depreciation there should be included in operating expenses the cost of replacement as retirements are made, and that therefore no deduction for depreciation should be made from cost new in an appraisal. Except for the largest and most varied properties, the policy of charging replacements instead of depreciation to operating expenses would not be practicable. If it could be and were followed generally, the authors' conclusion would, of course, apply to future investments; but it would not hold for the past when their theory was not followed, when rates to consumers were largely what the traffic would bear,

¹ For support of this view, see the reviewer's "Bases of Valuation in the Control of Return on Public Utility Investment," *AMERICAN ECONOMIC REVIEW*, vol. VI (Sept., 1916), pp. 570, 571, and 582 ff.

and when the property may or may not have been maintained according to reasonable standards. Not deducting depreciation from cost new would open the door for the inclusion in the appraisal of multitudes of items all but worthless, resulting in gross padding of the valuation.

It is urged that the investors should be given a share in the general prosperity, but that this be accomplished through an allowance of more than normal interest on investment rather than through the inclusion of appreciation in the rate base. Two questions are pertinent regarding this proposal: (1) How would the super-return be determined? (2) If there be additional return in lieu of appreciation, what corresponding adjustment for not deducting depreciation from the gross appraisal?

It is suggested also that additional returns be granted for volume of business. Again, how practically determine the super-rate? And, just why the allowance? Do the authors realize the real significance of a public utility and the purpose of regulation? We have to do with very important and almost universally necessary services; public service corporations and their control are merely the means of general coöperation for obtaining the services at least possible cost to the public. If this view be correct, then there is no reason for permitting additional returns for volume of business, nor for prosperity, except possibly for inducement to the best progressive management.

Turning to Mr. Barker's book, we find a more systematic discussion of the entire mechanism of regulation. It is perhaps the most orderly and generally comprehensive of the many engineering treatises on valuation and rate making. It offers no special formula of control; its purpose is mainly to analyze and describe existing procedure, and it succeeds very well. The discussion is carefully balanced, and it offers many excellent criticisms and suggestions. The author appears public-spirited, with possibly an over-confidence that his own state of mind is that of public service corporation officials. If space permitted, many minor points might be profitably discussed or criticized. On the whole, the book is an important addition to the literature on regulation, and should help in the formulation of more definite standards and procedure in valuation and rate making.

JOHN BAUER.

Princeton University.

Corporation Accounting. By R. J. BENNETT. Ronald Accounting Series. (New York: The Ronald Press Company. 1916. Pp. xxi, 563. \$2.70.)

This volume, as stated by the author in the preface, is concerned with "certain transactions, accounts, and entries employed in corporation accounting which are either peculiar to the corporation, or so seldom encountered elsewhere, that they may properly be termed distinctive."

Reading farther in the preface we are reminded that: "as stocks of differing characteristics are subscribed for, issued on varying terms, forfeited, donated, resold or cancelled; as bonds of different classes are issued, sold, purchased or redeemed at maturity; as sinking funds and reserves are set up for the protection and redemption of these bonds; as dividends are declared or assessments are levied; as companies are reorganized, liquidated, or become insolvent, the accountant is confronted with difficult problems—problems which frequently, because of the magnitude of the amounts involved, or because of the legal consequences of error, call for a care and accuracy of treatment beyond the ordinary."

The volume faithfully fulfils the intent of presenting adequate solutions and setting forth the established accounting practice for dealing with such problems. It is conspicuous for its systematic and orderly arrangement, beginning with the organization of a corporation and concluding with receiverships and dissolution. The exposition and the illustrative material have been prepared with a commendable thoroughness, no doubt reflecting the author's experience as a teacher of accountancy. Indeed, it seems hardly possible that such a completeness of detail could have been developed in any other way.

A work on corporation accounting provides an opportunity for extended comments on such matters as charters, by-laws, notices of meetings, corporate records, and numerous other details which are not literally a part of an accountant's duties. Owing to the fact that the same individual will in many corporations serve as secretary as well as an accountant or treasurer, these comments in regard to procedure will be to many readers just as interesting and valuable as the details in regard to accounting. There are necessarily many references to corporation law, and although the practice and the rules are generally well established in regard to the points mentioned, references to legal authors or decisions would add authority to many of the author's statements.

Throughout the volume the reader encounters the familiar and helpful device of hypothetical corporations which exist only on the author's pages, and solely for the purpose of illustrating his views. But Mr. Bennett has given added authority and interest to many of his observations by frequent citations from some of the best known corporations in the United States, such as The Pennsylvania Railroad, Packard Motor Car Company, Victor Talking Machine Company, Royal Baking Powder Company, and others.

In the preface and throughout the volume there is abundant recognition of alternatives of procedure. The author explains and usually illustrates all the different ways in which the accounting entries may be made and indicates what is thought to be gained by one course or another. The accounting theory which appears in the volume is sound and yet never dogmatic.

A feature of this volume which other authors might follow to advantage when opportunity permits, is the incorporation of extended quotations from well-known authors on special topics. Thus Mr. Bennett has arranged to reproduce a long quotation on "Bond discount and premiums" from Mr. A. Lowes Dickinson's well-known volume *Accounting Practice and Procedure*, and refers his readers to Charles E. Sprague's *The Accountancy of Investments* for details on sinking fund calculations, and to Robert H. Montgomery's *Auditing Theory and Practice* for details of audit procedure and reports.

Basing his opinion on a fairly wide acquaintance with the literature of accountancy published in English, the reviewer would state that Mr. Bennett's volume will come to take rank with the three well and favorably known volumes mentioned in the preceding paragraph as among the first ten or a dozen titles that should be owned by every one seriously interested in accountancy. The arrangement of the book makes it readily adaptable for general reference by corporation officers and accountants. As the author no doubt intended, it can be used to advantage in a class of advanced accounting studying corporation forms and problems.

When a new edition is prepared, it is to be hoped that more systematic and thorough attention will be given to the index, for, excellent as it is, it proved disappointing to the reviewer on several references, some of which should obviously appear in their proper alphabetical order.

CLINTON H. SCOVELL.

NEW BOOKS

- ANDERSON, DE L. & Co. *The accounting treatment of overhead construction costs in public utilities.* (New York: The author. 1917. Pp. 20.)
- ARONSON, S. *Selling your services.* (New York: Sales Service Co. 1917. Pp. 176. \$1.)
- ARTHUR, W. *Estimating building costs.* (New York: David Williams Co. 1917. Pp. 211.)
- BAYLE, F. *Les salaires ouvriers et la richesse nationale. La méthode Taylor et le salaire moyen. Premiers éléments d'une théorie du salaire. Application à la fabrication du matériel de guerre.* (Paris: Dunod & Pinat. 1917. Pp. 216. 6.50 fr.)
- BRADLEE, S. G. *Stock brokers' daily balance interest table.* (Boston: Financial Pub. Co. 1917. Pp. 95. \$7.50.)
- CHILDS, F. H. *A treatise on American business law, with illustrative cases.* In six volumes. Vol. 2, *Agency; partnership.* (Chicago: Walton School of Commerce. 1916. Pp. 725.)
- CRAMER, J. A. *The filing department.* (New York: Bankers Pub. Co. 1917. Pp. 110. \$1.)
- DERRICK, P. E. *How to reduce selling costs.* (London: Newnes. 1917. Pp. xviii, 221.)
- ETTINGER, R. P. and GOLIEB, D. E. *Credits and collections.* (New York: Prentice-Hall. 1917. Pp. 390. \$2.)
- GERSTENBERG, C. W. *The law of bankruptcy.* (New York: Prentice-Hall. 1917. \$2.)
- GILLEN, M. J. *Plan for establishing the base cost and the profits of American producers and suppliers of war goods.* (Racine, Wis.: The author, Mitchell Wagon Co. 1917.)

Two pamphlets containing what the author considers a simple and practical remedy for establishing the base cost and the profits for government purchases of war goods. The plan also provides for "an organization which will immediately marshal the resources of the nation, prevent confusion, provide immediate delivery of things now wanting, and save this nation hundreds of millions of dollars and at the same time immeasurably strengthen our national position at home and abroad." As a statement of the problem the proposal merits consideration, but the remedies submitted involve such comprehensive changes in the machinery of our government that their practical value is of rather doubtful significance.

M.J.S.

- GOWIN, E. B. *The executive and his control of men.* (New York: Macmillan. 1916. Pp. xv, 349. \$1.50.)

Professor Gowin presents a very able treatise on the character and make-up of the executive and his relation to superiors, subordi-

nates, and the public at large. He shows that, with the increasing size of industrial units and the growing complexity of surrounding communities, the problems confronting the executive are constantly demanding greater skill and more attention to underlying principles of human life. The book is divided into three parts: I, Individuality; II, Motivating the Group; III, Limits upon the Executive.

Part I shows in seven chapters the role which individuality plays in the success of executives. Examples are taken to show the energy and physical characteristics of leaders of all time. Physical size and power, a peculiar knowledge of just when and where to use all the powers in one's possession, stimulus in environment, emotion, originality, and alertness are shown to have an important bearing on the measure of a man's possibilities. These must be efficiently applied through the medium of organization and labor saving devices.

Part II gives different methods of transfusion of stimulus or motivating the group. Personality serves as a basis, surrounded by numerous devices such as art, illusion, discipline, and rewards appealing to the natural human tendencies of imitation, suggestion, emulation, and the unique but powerful agency of idealism. By the skilful combination of these elements, the leader becomes unified with or the impersonation of the cause. He, a man of optimism and enthusiasm, has pointed toward the heights and bade men transcend the limitations which pure reason would dictate. He demands much and he gets it. Expectation justifies itself by its fruits.

Part III outlines the limits placed upon the executive and the care he must take not to overstep the bounds nature has built up around mankind. His subordinates are not mere puppets and as a class, they instinctively oppose progress. He cannot be effective and be a generation ahead of his time. Competition comes in to dictate policies and force the executive from his predetermined path. Here also is illustrated from history the comparative youth of leaders in times of stress as against a peaceful era. The effectiveness of the executive is largely in proportion to his adaptability to changing circumstances, to the quickness and smoothness with which he associates himself with new conditions, and to his ability to obtain results without incurring a damaging opposition.

The whole work is marked by a keen insight, an uncommon penetration beneath the surface. It combines theory and practice, or, better, science and practice in a rather unusual way. It is a book which should commend itself to any who aspire toward positions of authority.

HARRY H. KING.

HAYES, P. L. *The bookkeeping teacher; a treatise on the science of double entry bookkeeping.* (Springfield, Mo.: The author. 1917. Pp. 126. \$6.)

HEWES, L. I. and GLOVER, J. W. *Highway bonds. A compilation of data and an analysis of economic features affecting construction and*

maintenance of highways financed by bond issues, and the theory of highway bond calculations. Bulletin no. 136. (Washington: Dept. Agri. 1916. Pp. 78.)

HUFFCUT, E. W. *The elements of business law.* Revised by G. G. BOGERT. (Boston: Ginn. 1917. Pp. 319. \$1.12.)

KERR, E. *The effect of wars and revolutions on government securities, external and internal.* (New York: William Morris Imbrie & Co. 1917. Pp. 131.)

KIX-MILLER, W., editor. *Story case-business law. A systematic non-technical treatment of business law in story and case form.* (Chicago: Commerce Clearing House. 1916. 7 vols. \$24.50.)

LEVY, F. F., compiler. *Universal sinking fund hand book.* (New York: Fabian Franklin Levy. 1917. Pp. 393.)

LOUGH, W. H. *Business finance. A practical study of financial management in private business concerns.* (New York: Ronald Press. 1917. Pp. xiv, 631. \$3.)

To be reviewed.

McJOHNSTON, H. *Business correspondence.* (New York: Alexander Hamilton Institute. 1917. Pp. xv, 328.)

MARTIN, M. *Advertising campaigns.* (New York: Alexander Hamilton Institute. 1917. Pp. xvii, 338.)

MINTURN, J. A. *Price-regulation under patents.* (Indianapolis: Minturn & Woerner. 1916. Pp. 56. \$1.)

MOODY, J. *Moody's analyses of government and municipal securities.* (New York: Moody's Investors Service. 1917. \$15.)

MORGAN, H. E. *Business organisation.* (London: E. Nash. 1916. Pp. viii, 253. 5s.)

NYSTROM, P. H. *Retail store management.* (Chicago: LaSalle Exten. Univ. 1917. Pp. viii, 242.)

This textbook on store management was prepared to meet "the demand among retail store workers, managers, and employees" for a treatment of "the essential principles and facts concerning the location, equipment, organization, and management of a store." It deals with retailing in general and proposes principles which apply to big and little stores equally. No attempt is made to treat retailing theories still under experimentation, but only proven theories. There are developed such matters as the location of stores, the organization of the buying, selling, and accounting departments; the question of store policies; and the employment problems—finding good employees, remunerating, educating, and caring for them. It is designed for use as textbook, is in very simple style, and each chapter is followed by a list of questions bringing out the data of the chapter section by section.

Retail Store Management is closely related to the author's other books, *Retail Selling and Store Management* (Appleton, 1914) and

The Economics of Retailing (Ronald Press, 1915). The Appleton text gives 125 pages to the theory and practice of selling, which subjects are not treated in the other two texts; but the latter part covers many of the same topics found in the LaSalle text: e.g., store policies, buying a retail store, relation of salesmen to employer and to public, etc. The Ronald text devotes 68 pages to an introduction showing the position and importance of retailing in our distributive system; the second group of topics is the expense of retailing, rent and location, store-wages, and prices; the third division treats the relative competitive advantages of the department stores, chain stores, and mail-order houses; and it closes with a discussion of some economic problems such as price maintenance, retail store failures, public regulation of retailers, and the oft-raised question, "Are there too many retailers?" The Ronald text is written for students of economics, has a more scholarly style and content, and is not so exclusively expository as the other two; it interrelates the practices of retailers with the principles of economics and contributes to that rapidly developing field of economics—marketing. Taken together, Dr. Nystrom's books constitute no small part of the recent useful literature of modern retailing. The Appleton text is bipartite and makes the three repetitive; the portions on store management should be transferred to the LaSalle text and the three texts would then have more or less exclusive fields.

RAY BERT WESTERFIELD.

PARKHURST, F. A. *Applied methods of scientific management*. Second edition. (New York: Wiley. 1917. Pp. 337. \$2.)

PARSONS, C. C. *Office organization and management*. (Chicago: LaSalle Exten. Univ. 1917. Pp. xiv, 313.)

ROSS, G. E. *Cost keeping and construction accounting, adapted to any work consisting of numerous items, departments or divisions on which detailed unit costs are desired*. (Salem, Oregon: George Edward Ross. 1917. Pp. xiv, 59. \$1.25.)

SELDEN, G. C. *Investing for profit*. Second edition. (New York: Magazine of Wall St. 1917. Pp. 173. \$1.)

STEVENSON, R. A. *Municipal accounting*. University of Iowa Extension bulletin no. 22. (Iowa City: Univ. of Iowa. 1916. Pp. 24.)

SWINNEY, J. B. *Merchandising*. (New York: Alexander Hamilton Inst. 1917. Pp. xxi, 355.)

THOMPSON, C. B. *The Taylor system of scientific management; a report, in manual form, on the accomplishments of scientific management, supplemented with a discussion of how to secure some of the most important of these accomplishments*. (Chicago: A. W. Shaw Co. 1917. Pp. 175. \$10.)

WAHLSTAD, P. P. *Credit and the credit man*. (New York: Alexander Hamilton Inst. 1917. Pp. xviii, 342.)

WALKER, W. H. *Corporation finance*. (New York: Alexander Hamilton Inst. 1917. Pp. xv, 346.)

The administration of estates and trusts. (New York: United States Mortgage & Trust Co. 1917. Pp. 46.)

America's changing investment market. Edited by E. M. PATTERSON. (Philadelphia: Am. Acad. Pol. & Soc. Sci. 1916. Pp. ix, 342.)

Burnham's manual of Chicago securities, 1917. An investor's handbook of useful information concerning the principal securities bought and sold in Chicago and the Middle West. (Chicago: J. Burnham & Co. 1917. Pp. 442.)

Michigan manual of corporation statistics, 1916. (Detroit: Michigan Manufacturer and Financial Record. Pp. 255.)

Issued under the direction of the Detroit Stock Exchange to provide a standard handbook of the securities which have been validated by the Michigan Securities Commission. It includes the text of the act of 1915 requiring the supervision of all issues of stocks and bonds of corporations offered for sale in Michigan; data relative to securities authorized by the Michigan Railroad Commission; and a table giving the capitalization, surplus and undivided profits of all Michigan banks.

Practical coöperation in the real estate and general brokerage business; how to become an efficient real estate agent and general broker. (Los Angeles, Cal.: Macdonald Coöperative Realty Co. 1917. \$25.)

Railroad bond issues officially regarded as legal investments in the state of New York, as of January first, 1917. Second edition. (New York: Wood, Struthers & Co. 1917. Pp. viii, 201.)

Scientific management; a list of references in the library. (New York: New York Public Library. 1917. Pp. 81. 25c.)

Thrift by household accounting and weekly cash record forms. Published for the Ellen H. Richards memorial fund by the committee on household budgets. (Baltimore, Md.: American Home Economics Assoc. 1916. Pp. 34. 15c.)

Capital and Capitalistic Organization

The Morals of Monopoly and Competition. By HOMER BLOSSER REED. (Menasha, Wis.: George Banta Publishing Company. 1916. Pp. 141. \$1.25.)

The thesis of the author—a professor of philosophy—is that our moral concepts, so far as these are embodied in judicial opinion, are gradually modified by changes in the economic environment; and he illustrates this proposition by describing the development of the moral law in the period of transition from a competitive régime in industry to a monopolistic one.

The competitive régime in industry represented a reaction against the monopolistic régime which had preceded it. The public had become weary of the monopolies granted by the Crown, and therefore welcomed the new order. The competitive system, moreover, had many advantages. It tended to develop efficiency in production; for the inefficient who could not produce with a profit at a competitive price were perforce eliminated. It also offered full range to individual initiative and enterprise. It is true that the competition was often keen, and resulted in special favors to certain customers or in undue vaunting of one's wares. But so long as the competitors had approximately equal resources, this worked no special injury. As a result, competition came to be regarded as the "life of trade." And gradually the current notions as to what was moral under a state of competition became definitely crystallized in the common law.

But with the development of larger units in production and of combination the situation changed. It was then seen that a combination possessed of ample capital might, by means of railroad rebates or local price cutting, destroy a smaller competitor, perhaps of equal or greater efficiency in production. We then begin to hear of "unfair competition" and "predatory competition." The current use of these phrases indicates that a moral consciousness was being aroused. The combination, though it had merely carried out the "good old-fashioned laws of competition," was commonly dubbed an Octopus. Which merely means that the current ideas as to what was moral had changed to meet the new economic conditions. And the courts, though they will eventually give full recognition to the new state of affairs, have done so but haltingly. It is this failure of our ethical concepts as embodied in the law to develop as rapidly as economic conditions that accounts, according to the author, for the existence of a trust problem.

The author also predicts that the large industrial combinations (he does not make it clear whether he refers solely to monopolies or to all combinations) will in the course of time come to be recognized as public service corporations, and will be subjected to regulation in much the same way that the railroads now are. But he does not make his point. Though he recognizes fully the potency of unfair methods of competition (he gives quite a number of pages to illustrations of unfair competition), he presents no argument to show that the prevention of unfair competition by law and by the elevation of morals will not lead gradually to the restor-

ation of competitive conditions where these have been destroyed by unfair tactics. While the author may be right in his opinion as to the permanence of industrial monopoly—he is not alone, of course, in his belief—this is a matter upon which it is unwise to adopt a cock-sure attitude, particularly in view of the many opposing considerations. It is generally the case that the more deeply one delves into a controverted question, the more unwilling he becomes to enter into the hazardous realm of prediction.

ELIOT JONES.

Leland Stanford Junior University.

Some Legal Phases of Corporate Financing, Reorganization and Regulation. By FRANCIS LYNDE STETSON, JAMES BYRNE, PAUL D. CRAVATH, GEORGE W. WICKERSHAM, GILBERT H. MONTAGUE, GEORGE S. COLEMAN, and WILLIAM D. GUTHRIE. (New York: The Macmillan Company. 1917. Pp. ix, 389. \$2.75.)

The book is a series of essays by legal authorities, obviously written for younger members of the bar. As such it deals with particular problems in the peculiarly narrow and intensive manner of legal procedure. This is its great merit, but it is also the reason why the broader economic aspects of the problems treated are either totally disregarded or else disposed of with only a few phrases. Yet within their field of legal literature most of these essays are remarkably comprehensive; in fact, several of them, notably Cravath's on reorganizations, are certainly unrivaled in the sphere of legal finance.

The chapters may be conveniently divided into two sections. The first covers certain topics of corporation finance and the second certain questions arising out of the public regulation of corporations. They are of unequal merit, the essays of the earlier part being on the whole superior and more carefully prepared.

The book opens with Stetson's Preparation of Corporate Bonds, Mortgages, Collateral Trust and Debenture Indentures. Unquestionably so much comprehensive information on this topic cannot be found anywhere else. It deals with the structure of mortgages and similar instruments of essentially large corporations. It has the somewhat uncritical point of view of one who would justify, in all respects, the present forms. In that sense it is unsympathetic with that movement which would simplify and shorten corporate instruments and rely more on an established body of judicial and

public opinion than on legal phraseology. The old New York and Erie mortgage of 1847, short and unscientific to the thinking of a Wall Street lawyer, has stood the test of several reorganizations and the bonds issued under it are probably as sound as any corporate obligation in existence. The strength of a mortgage or debenture is property, earning power, and that force of judicial and public opinion which insists on a corporate morality independent of and above legal quibbles.

Byrne's essay on the Foreclosure of Railway Mortgages is a very keen yet comprehensive summary of current practice. It contains the best short statement of that knotty problem, the treatment of unsecured claims, which the present reviewer has ever seen. It is best because it sees *Fosdick vs. Schall* in true perspective, neither as a "bugbear" nor as "fundamental law."

Were I to single out the essay which most impresses me as that of a master it would be Cravath on The Reorganization of Corporations. There is no more perplexing field in the whole range of corporation finance, and the author of this essay nowhere shows himself more a keen student of the subject than when he naïvely comments, "Plans of reorganization are rarely strictly logical." The trouble with most writers on this subject is that they either despair of seeing order—their accounts degenerating into a mere patchwork of ephemeral and unrelated cases—or else they seek to become "general" with the result that their generalizations are so amateurishly superficial as to be utterly worthless. This essay does neither. It shows a thorough and painstaking working over of the written material amplified in addition by the writer's acknowledged practical familiarity. It is well written according to a clearly defined method of presentation, not a mere unorganized patchwork of notes with which some "busy practical men" insult their audiences. Penetrating and comprehensive as is the essay it has nevertheless the bias of the legal profession. The author does not give the economic and social (and often personal) elements that underlie any reorganization their proper perspective. Moreover he is apt to bring into bold relief transient and perhaps ephemeral decisions as if they were final. He is quite as worried over the Boyd case as was the late A. H. Jolie over the Monon case when the latter delivered the now classic lectures on reorganization before the Harvard Business School.

Mr. Wickersham's essay on the Sherman Anti-Trust Law is somewhat of a disappointment, in the light of the writer's sin-

gularly wide familiarity with its workings both from within and without. While all that is said is true enough (and has been said many times before) it contains no enlightening insight into the subtle current of judicial opinion, swerving in one direction and then another, which if understood aright helps to predict the future. For illustration, Wickersham suggests, as everyone knows, the fundamental and vitally important difference between the majority and minority opinions in the Harvester case, but a study of the writer's survey of the cases, from Knight to Nash, gives us no suggestions as to how the court might reason in this particular issue. Yet this very point is now the most important issue within the field. Furthermore, like many lawyers, he is blind to the economic and social background which explains, much better than legal subterfuges, the reason why the minority opinion in the Knight case later became law and why the spirit of Holmes's dissenting opinion in the Northern Securities case has had such an abiding influence.

Montague's discussion of the Federal Trade Commission and the Clayton act leaves a very indecisive impression. The application of these acts is of the future and there is little precedent from which to construct theories of established policies.

Coleman's essay entitled The Public Service Commission is superficial and scrappy. His laudatory attitude toward the ability of the average commissioner has blinded his critical sense; and his eulogy of the personnel of the New York First District Commission is almost humorous. Guthrie's essay on the same subject, on the other hand, is a refreshing criticism of the mere bureaucratic authority of commissions. He deplores, as all students of the subject must, the utter lack of technical or special training usually at the command of appointees to public service bodies. The root of the evil is, of course, politics and political debts. Into the hands of a "lame duck" senator or a country lawyer without a practice the transportation of the country is cast by the law, bound hand and foot. Every year, in the real interest of public welfare, the number of commissions is increased, with added burden to the public treasury only to degenerate into snug harbors for political refugees.

ARTHUR S. DEWING.

NEW BOOKS

BURNETT, D. F. *Cases on the law of private corporations, selected and*

supplemented with notes. (Boston: Little, Brown. 1917. Pp. xxix, 828. \$5.)

GERSTENBERG, C. W. *Organization and control.* (New York: Alexander Hamilton Inst. 1917. Pp. xviii, 351.)

Organization and Control deals not with the internal management and control of business units, as the title might indicate, but rather with the external organization and ownership of industrial enterprises and the control of their business policies. In other words, this is not a work on business management, but on the structure of the business unit. It deals with the relationships that exist among the various interests therein, and the distribution of the incidents of ownership under the various forms of industrial organization that have been used "among English-speaking people."

The book approaches the subject largely from the legal standpoint, although there is nothing of a technical legal nature in the content. It is obvious, however, that the author considers the legal rights and obligations of the parties to the business unit as the essential thing for the student to grasp. This feature is emphasized especially in the problem questions which close each chapter and which help to make the book especially valuable as a text for class-room work. These two features (the emphasis on the law of business enterprises and the problems) are the most strikingly characteristic marks which the book possesses. In the first, Mr. Gerstenberg betrays his legal training and interest, while in the second he reflects the opinion of the experienced teacher.

There is but little that is new in the treatise, apart from the problems referred to above. It is, from the very nature of the subject, a description of facts and relationships which exist rather than a speculative treatment of something which ought to exist. But it presents the subject in a remarkably clear and readable manner, illuminates the material with a number of well-selected business forms, and arouses interest by suggestive questions on hypothetical corporate problems.

The closing chapters of the book deal with the questions growing out of concentration and combination in business. In them the author examines the causes that have led up to the present high degree of centralized control, traces the evolution of the "trust" through the various forms which it has taken and outlines the advantages resulting from industrial consolidation. Illegal combinations are discussed and the book closes with a history of the law of monopolies and an analysis of recent legislation on the trust question.

FLOYD E. ARMSTRONG.

HEATH, H. M. *A manual of Maine corporation law, containing the statutes regulating business corporations, a digest of these statutes, and the principal corporation forms used in Maine.* Second edition, revised and enlarged. (Portland, Maine: Loring, Short & Harmon. 1917. Pp. xv, 340.)

OBERREICH, L. H. *Control of corporate finance.* Bulletin no. 10.

(Indianapolis, Ind.: Indiana Bureau of Legislative Information. 1917. Pp. 66.)

Prepared at the request of Governor Ralston of Indiana in order to assist the general assembly in preparing for the enactment of a blue sky law. Embodies a review of certain flagrant corporate abuses and a brief syllabus of the remedies suggested to meet them.

STRAUSS, F. *The modern underwriting syndicate*. (New York: The author, Care of J. & W. Seligman & Co. 1917. Pp. 29.)

WOOD, W. A. *Organization and management of corporations with forms*. New revised edition. (Indianapolis: Bobbs-Merrill. 1917. \$4.)

Business corporations under the laws of Delaware; shares without par value. Fourth edition, revised to include 1917 legislative changes. (Wilmington, Del.: Corporation Trust Co. of America. 1917. Pp. 32.)

Commission leaflets (nos. 47-53 inclusive) containing selected commission decisions, November, 1915-May, 1916. (New York: American Telephone & Telegraph Co. 1917. Pp. lxx, 1568.)

Public utilities reports annotated containing decisions of the public service commission and of state and federal courts. 1917. A. (Rochester, N. Y.: Lawyers Coop. Pub. Co. 1917. Pp. lxxii, 1263. \$5.)

Special commission to consider the financial condition of the Boston Elevated Railway Company, proceedings July 21-Dec. 27, 1916. House doc. no. 1875. (Boston: 1917. Pp. 354.)

Labor and Labor Organizations

Conditions of Labor in American Industries. A Summarization of the Results of Recent Investigations. By W. JETT LAUCK and EDGAR SYDENSTRICKER. (New York: Funk and Wagnalls Company. 1917. Pp. xi, 403. \$1.75.)

The authors have done a valuable service in bringing together in conveniently accessible form a large amount of statistical material bearing on the economic status of the wage-earner. The book, we read in the introduction, "is a statement, rather than a description of some of the fundamental conditions of labor in modern industry in the United States, which, it is hoped, will prove useful to the student, be he in the classroom or in his vocation, employer or employee, business man, social worker or legislator."

The main emphasis throughout is laid on the income of the wage-earner and the question of its sufficiency from the standpoint of maintaining adequate standards of living. One chapter sets forth the existing statistical data on individual wages and earnings,

another is devoted to family incomes, and the final chapter in the book is a discussion of the adequacy of the wage-earner's income.

The two chapters on unemployment are of course related closely to the question of sufficiency of earnings. The same subject is in the foreground in the chapter on Living Conditions, while in the discussion of the wage earner's health we are continually reminded that health is "purchasable" and that low wages makes it difficult to maintain health standards. This leaves only chapter 1, The Labor Force, and chapter 5, Working Conditions, where income is not the dominant note.

The statistical data presented—most of which was gathered for the United States Commission on Industrial Relations—are quite extensive and taken principally from the United States census, general and special studies made by the United States Bureau of Labor, the report of the United States Immigration Commission of 1908-1909, reports of various state bureaus, minimum wage commissions, and reports of private investigators. No attempt is made to estimate the effect of the rapid changes in rates of wages during 1915 and 1916, because of the absence of any sufficiently authoritative information on the subject and because the permanency of these changes is regarded as "problematical."

On the basis of inquiries made prior to 1914 the authors conclude that a third of the adult male workers of the country earned less than \$400 annually, and two thirds less than \$600, while a fourth of the women workers earned less than \$200 and two thirds less than \$400. It is estimated that the "average" wage-earner loses from 10 to 20 per cent of his possible working time during the year, including a loss of nine days on account of sickness.

There is very little new material in the book. Its purpose, on the contrary, was to make easily available existing material, and this the authors have done in a painstaking manner. Particularly valuable are the discussions of unemployment, its causes and effects; family income; and the health of the worker.

The chapter on Working Conditions is less satisfactory, partly because the space allotted to it is too small for adequate discussion of the subject and partly because of errors in statement. There is no discussion of the attitude of the courts toward laws regulating hours of labor, beyond a single sentence which was of doubtful accuracy when written, and which on account of the recent decisions on the Adamson law and the Oregon 10-hour case has been rendered wholly contrary to fact.

The statement in this chapter that "only one large operator in the bituminous region has succeeded in remaining non-union" disregards the fact that there are several bituminous regions and that in at least four of them—Western Pennsylvania, West Virginia, Alabama, and Colorado—there are non-union operators with extensive interests, including the H. C. Frick Coke Company, the Tennessee Coal, Iron and R. R. Company, and the Colorado Fuel and Iron Company—to name but few.

The official opposition of the American Federation of Labor to restrictions in hours of labor by law is inaccurately ascribed to the violent opposition of the majority to everything proposed by the socialist group. As a matter of fact, when the matter first came up, in the Philadelphia convention in 1914, it was the non-socialistic Pacific Coast delegation that made the strongest fight for the principle of eight hours by law.

It is unfortunate that so little attention is paid to unionism and collective bargaining in this book on conditions of labor. There is an enumeration of unions and a statement as to their membership but no discussion of their tactics or the part they play in making industrial history. There is a brief statement that organized labor is "without exception opposed to welfare work of every kind," an inference which is quite misleading, especially in view of the authors' rather comprehensive definition of welfare work.

Perhaps the chief weakness of the book is the tendency to dogmatize from insufficient data. One very impressive thing about the statistical exhibit is the fact—as all students of labor conditions know—that we are sadly lacking in authoritative statistics of earnings. What we have may justify us in coming to conclusions in the main quite similar to those of Messrs. Lauck and Sydenstricker. It is not safe, however, to speak with much assurance, especially when the main dependence, as in this book, is on the report of the Immigration Commission. The wages data in that report were gathered in the panic year of 1908 and for some of the industries covered are obviously unrepresentative. Furthermore, the number of individuals included, in some industries, was relatively so small that generalizations for the industry seem to lack justification.

One can agree with the authors, however, in their conclusions that the earnings of heads of families have been in many industries and for millions of wage-earners too low to admit of a standard of living that would afford the maintenance of health and satisfactory

conditions of living. The fact that the authors deplore this situation makes it the more surprising that they themselves fix upon \$800 as an income that will maintain for the average workingman's family "a standard of living that, with ordinary frugality, will allow provisions for separate and decent existence, health, and a modicum of reasonable comfort" (p. 368). The authors are themselves so much in doubt about the adequacy of this sum that on the very next page they make it read \$800 or \$900. At the same time they quote conclusions both of Chapin and of the Children's Bureau that indicate pretty clearly that \$800 is not enough to maintain a normal standard. Estimates of a minimum "living wage" will never be worth very much until the calculators give the benefit of the doubt to the human factors involved instead of to the payroll.

It is to be hoped that a second edition of the book may be required in order that an opportunity may be afforded the authors to correct the many errors of lesser consequence, which are plainly due to hasty proof reading.

JOHN A. FITCH.

NEW BOOKS

AMAR, J. *Organisation physiologique du travail*. (Paris: Dunod & Pinat. 1917. Pp. 374. 18 fr.)

ANDREWS, J. B. *Anthrax as an occupational disease*. Bulletin of the United States Bureau of Labor Statistics, whole no. 205; Industrial accidents and hygiene series, no. 10. (Washington: Superintendent of Documents. 1917. Pp. 155.)

ATKINSON, H. A. *Arbitration in industrial disputes*. (Philadelphia: Am. Baptist Pub. Soc. 1917. Pp. 16.)

CLOPPER, E. N. and HINES, L. W. *Child labor in the sugar-beet fields of Colorado*. (New York: National Child Labor Committee. 1917. Pp. 30.)

COMBAT, E. and F. J. *Le travail des femmes à domicile, 1914-1916*. (Paris: Berger-Levrault. 1917.)

FYFE, T. A. *Employers and workmen under the munitions of war acts, 1915-1916*. Second edition. (London: Hodge. 1916. Pp. 269. 10s. 6d.)

REELY, M. K. *Selected articles on minimum wage*. Debaters' handbook series. (White Plains, N. Y.: Wilson. 1917. Pp. 202. \$1.35.)

SELEKMAN, B. M. *Industrial disputes and the Canadian act. Facts about nine years' experience with compulsory investigation in*

Canada. (New York: Russell Sage Foundation. 1917. Pp. 42. 20c.)

SUMNER, H. L. and HANKS, E. E. *Administration of child labor laws.* Part 2, *Employment-certificate system, New York.* Bureau publication no. 17. Industrial series no. 2, part 2. (Washington: U. S. Dept. of Labor, Children's Dept. 1917. Pp. 164.)

VAN KLEECK, M. *A seasonal industry. A study of the millinery trade in New York.* (New York: Russell Sage Foundation. 1917. Pp. x, 276. \$1.50.)

DE VESSELITSKY, V. *The home worker and her outlook.* (London: Bell. 1917. Pp. 118. 2s.)

WALTER, H. R. *Munition workers in England and France; a summary of reports issued by the British Ministry of Munitions.* (New York: Russell Sage Foundation. 1917. Pp. 48. 20c.)

WEBB, S. *The restoration of trade union conditions.* (London: Nisbet. 1917. Pp. 109. 1s.)

WEISMAN, C. *Studies in vocational diseases: the effect of gas-heated appliances upon the air of workshops.* (Washington: Public Health Service. 1917. Pp. 84.)

WEYFORTH, W. O. *The organizability of labor.* Johns Hopkins University studies in historical and political science, series XXXV, no. 2. (Baltimore: Johns Hopkins Press. 1917. Pp. 277.)
To be reviewed.

Final report of the United States Commission on Industrial Relations; including the report of Basil M. Manly, director of research and investigation, and the individual reports and statements of the several commissioners. (Washington: Superintendent of Documents. 1917. Pp. 269.)

The longshoremen's strike. A brief historical sketch of the strike inaugurated on June 1, 1916, in Pacific coast ports of the United States. (San Francisco: Waterfront Workers' Federation. 1917.)

Proceedings of thirty-third annual convention of Ohio State Federation of Labor, held in Toledo, Ohio, October ninth to thirteenth, nineteen sixteen. (Cincinnati: Thomas J. Donnelly, Typographical Union. 1917. Pp. 124.)

Report of the Department of Labour for the fiscal year ending March 31, 1916. (Ottawa: Dept. of Labour. 1917. Pp. 121. 10c.)

The unemployment problem, cause and cure, by "Analyticus." (Schenectady, N. Y.: Sociology Club. 1916. Pp. 170.)

Arbetstidens längd vid frisersalonger och badinrättningar i sverige. (Stockholm: Norstedt. 1916. Pp. 130.)

Skogsarbetarnas levnads- och arbetsförhållanden i Varmland, Dakarna, och Norrland. (Stockholm: Isaac Marcus. 1916. Pp. 244, 399.)

Money, Prices, Credit, and Banking

NEW BOOKS

ANTHONISZ, J. O. *Currency reform in the Straits Settlements*. (London: R. W. Simpson & Co. 1917.)

BAKER, C. *Federal reserve manual*. (Philadelphia: National Bank News. 1917.)

FAVRE, J.-E. *Le capital français au service de l'étranger*. (Paris: Bibl. Financière. 1917. Pp. liv, 270. 3.50 fr.)

FOSTER, M. B. *Banking*. (New York: Alexander Hamilton Inst. 1917. Pp. xvi, 348.)

To be reviewed.

GILBERT, E. *The United States half cents. From the first year of issue, in 1793, to the year when discontinued, 1857*. (New York: Elder Numismatic Press. 1916. Pp. 32. \$3.50.)

HAM, A. H. *Interest tables for small loans*. (New York: Spectator Co. 1917. Pp. iv, 52. \$4.)

These tables were "prepared to meet the demand on the part of small lenders on chattle mortgages and wage assignments, pawn-brokers, credit unions and other small money-lending agencies for Interest Tables at certain rates of interest, on certain amounts and for certain periods of time not covered by the usual bond and interest tables."

The tables are concerned with loans for short periods of time as well as for small amounts, and are on a simple interest basis. The amount of interest is given to a degree of accuracy often called "the value to the nearest cent." In thus expressing results to cents a question arises as to what criterion shall be adopted when the result is midway between two round numbers expressed, in cents. Thus on page 1, we note that the interest (.025) on \$5 for 15 days at 1 per cent per month is recorded as .03. Other examples of the same kind may be drawn from the same page. To record, in such a case, .03 rather than .02 accords with the commercial practice of counting the half cent as a whole cent in a final result. But at some other parts of the tables this idea is not carried out, and it is not clear to the reviewer what criterion has been used. Thus on page 28 the interest (.625) on \$25 for 1 month at $2\frac{1}{2}$ per cent is given as .62 rather than .63, while on page 29 the interest on \$25 for 1 month at $2\frac{1}{2}$ per cent is given as .63. In considering this point of adjusting values by neglecting a fraction of a cent equal to or less than one half, we may note, from page 1, that the tabular interest on \$10 is equal to double that on \$5 in only 15 of the 30 cases recorded. From page 2 we note that the tabular interest on \$40 is double that on \$20 in only 10 out of 30 cases. A difference of one cent in the interest is, of course, a small matter if we are dealing with large sums, but with a small principal the relative error may be very significant.

In addition to the tables certain formulas are given in the book for

determining the annual interest rate, amount of interest charge, annual discount rate, and amount of discount on loans payable in equal periodic instalments computed on unpaid balances and *not compounded*. Information given by the results from these formulas is useful because we are, in general, accustomed to regulate interest rates when expressed on an annual basis. It is important to emphasize that the formulas imply no compounding of interest. That is to say, the formulas apply strictly to the case of no investment of interest until the ends of years.

These tables will no doubt be of considerable service for the particular purposes for which they have been prepared, including the regulation by law of small loan business.

H. L. RIETZ.

HAYWARD, W. R. *Money: what it is and how to use it*. (Boston: Houghton Mifflin. 1917. Pp. 161. 80c.)

MANNING, J. H. *Century of American savings banks*. (New York: B. F. Buck & Co. 1917. 2 vols.)

PATTERSON, F. L. S. *Domestic and foreign exchange*. (New York: Alexander Hamilton Inst. 1917. Pp. xv, 298.)

PERINE, E. T. B. *The story of the trust companies*. (New York: Putnam. 1916. Pp. xvii, 327. \$1.50.)

An interesting narrative covering the history of trust companies in the United States from the early part of the last century to the present time, with many illustrations of old photographs and facsimiles of stock certificates, notes, and advertisements. The author's investigations also relate to state banking. There is a bibliography of four pages.

PHIPSON, C. B. *The true cause of the commercial difficulties of Great Britain*. (London: Allen & Unwin. 1917. Pp. 153. 2s. 6d.)

PIERSON, L. E. *The trade acceptance in national preparedness*. (New York: Irving National Bank. 1917. Pp. 22.)

STANOYEVICH, M. S. *Tolstoy's interpretation of money and property*. Reprinted from *Liberty*, Dec., 1916. (Oakland, Cal.: Liberty Pub. Co. 1916. Pp. 17. 25c.)

A scholarly essay with many footnotes.

STEELE, F. E. *How our overseas trade is financed*. (London: Butterworth & Co. 1916. Pp. 22. 1s.)

WILLCOX, J. M. *A history of the Philadelphia Saving Fund Society 1816-1916*. (Philadelphia: Lippincott. 1916. Pp. 239.)

This history of the first savings bank organized in the United States was compiled from the minutes, records, and account books of the bank in commemoration of the one hundredth anniversary. The efforts of Condé Raguet who played a large part in the establishment of the institution is abundantly illustrated by generous excerpts from correspondence. Appendices contain articles of associa-

tion and the charter. The volume is handsomely printed, with many portraits.

WOLFF, H. W. *Coöperative credit for the United States*. (New York: Sturgis & Walton. 1917. Pp. 349. \$1.50.)

YOUNG, W. L. and HEROLD, J. B. *Young's digest of the laws of the state of Louisiana relating to banks, savings banks, and trust companies*. Second edition. (Shreveport, La.: M. L. Bath Co. 1916. Pp. 234. \$7.50.)

Increase of prices of commodities since the beginning of the war. Second and third reports of Departmental Committee. (London: Wyman. 1917. 3d.)

Key to numerical system of the American Bankers Association; a numerical and alphabetical list of banks of the United States. Fourth edition. (Chicago: Rand, McNally. 1917. Pp. 571. \$1.50.)

Wholesale prices of leading articles in United States markets. January, 1914, to December, 1916. Miscellaneous series no. 52. (Washington: Dept. of Commerce. 1917. Pp. 14.)

Public Finance, Taxation, and Tariff

Financing the Public Schools. By EARLE CLARK. (Cleveland, Ohio: The Survey Committee of the Cleveland Foundation. 1915. Pp. 133. 25 cents.)

Public Education in Maryland. By ABRAHAM FLEXNER and FRANK P. BACHMAN. A Report to the Maryland Educational Survey Commission. (New York: The General Education Board. 1916. Pp. xviii, 176.)

The Public Schools of Springfield, Illinois. By the Division of Education of the Russell Sage Foundation under the direction of LEONARD P. AYRES. (Springfield, Ill.: Springfield Survey Committee. 1914. Pp. 151. 25 cents.)

These books embody the results of local educational surveys of the sort that is now becoming so common and so useful. To the economist their chief interest lies in the treatment they give to the topic of school finance—to which, indeed, the first volume is wholly devoted. All tell substantially the same story of increasing expenditure for public education, and of the need of still larger expenditures, at least in certain directions. Teachers are underpaid, material equipment even for present tasks is often inadequate or defective, and additional resources are needed for new lines of work.

The volume of the Cleveland Education Survey is naturally the most valuable of the three for the student of public finance. It

analyzes with great detail the finances of the Cleveland schools, and finds that, while the expenditures increased from \$2,360,000 in 1902-1903 to \$4,770,000 in 1913-1914, Cleveland was still "in many important respects below the standard set by cities of similar size"; and that the revenues of the board of education have failed to grow as rapidly as the outlay, so that "the Board has been forced to borrow money on short time notes in order to meet its current obligations." The lack of adequate revenue is largely due to the Ohio tax-limit law of 1911, although repeated changes in the laws relating to assessments have intensified the difficulty. The book supplies valuable information concerning some of the unfortunate effects of the tax law of 1911.

The Maryland report is valuable particularly for its criticism of the methods followed in the distribution of state school funds. The proceeds of the state school tax are distributed among the counties upon the basis of population between the ages of five and twenty years, which ignores differences of wealth as well as the higher cost of instruction in many rural districts. Other state funds are differently distributed; but in no case with satisfactory results, while in some instances flagrant abuses have long existed and funds have been misapplied or wholly wasted. Under existing conditions, therefore, educational facilities are not equalized, while conditions are made worse by the chaotic conditions of local assessments upon which the levy of the school tax is based. An equal assessment of property and a rational method of distribution are both necessary; and until they are secured, equalization of educational opportunities and burdens cannot be attained.

C. J. BULLOCK.

The Purposes of the Indebtedness of American Cities, 1880-1912.

By FRED EMERSON CLARK. Municipal Research No. 75.
(New York: Bureau of Municipal Research. 1916. Pp.
v, 72. \$1.00.)

Mr. Clark prepared this study as his dissertation at the University of Illinois and the Bureau of Municipal Research has published it because it is "believed that it will be appreciated as a valuable contribution to works of reference on municipal government." The discussion deals with the purposes of issue of so-called funded or special assessment loans, limiting the comparison to per capita debt, although Mr. Clark states that "probably a comparison of the relation of debt to the incomes of the people or to their wealth

would be more satisfactory, but no suitable facts are available for such a purpose."

The cities are divided into five groups according to population, the largest group being those with over 500,000 and the smallest those with from 30,000 to 50,000. A geographical distinction has also been made: North Atlantic, South Atlantic, South Central, North Central, and Western. In the first part of the discussion, the question is considered historically for the three periods 1880-1890, 1890-1904, 1904-1912. The sources used are census reports on Wealth, Debt and Taxation and annual reports of the same bureau since 1904. The first period was one of decrease in per capita debt, as a result of the restrictions placed on municipal indebtedness, caution learned from the panic of 1873, and the uncertainty of the years immediately preceding and following the panic of 1884. Both the second and third periods are characterized by increase. From the geographical point of view, cities of the North Atlantic section have led in growth of population, number of cities, and increase in the burden of indebtedness.

There has been, too, a general increase in the importance of loans for productive purposes in comparison with those for non-productive purposes. Bonds for productive purposes are for those properties producing an income which can make them self-sustaining. This increase was especially rapid during the last period, 1904-1912, and was marked in all sections except the North Atlantic, in which it was already large in 1904.

The most significant chapter is that which deals with the changes in the purposes for which these loans have been incurred. Expenses for water works have caused the largest single debt for all cities in each year. Indeed the per capita burden for this purpose and the number of cities with such works were both greater in 1912 than in 1880. However, the water debt was less important in relation to the total indebtedness in 1912 than in 1880. The second group of productive properties is electric and gas plants. The greatest per capita burden and largest per cent of total debt for these purposes has been borne not by the largest but by the smallest cities. The burden has been increasing both in number of cities and in amounts but it is still small—less than one per cent of the total for 1912. The third group of such items is called "all other productive purposes" and includes cemeteries, improvements of waterways, bridges on which a toll is charged, markets and street railways. Of these the most important was that for im-

provement of waterways, but of course this was limited to comparatively few cities. The total amounts, however, were such as to make this group of expenses the cause of the largest relative increase in the total productive debt. "In both 1904 and 1912 the per capita debt of the North Atlantic cities was more than ten dollars greater than that of any other section and of more than eight per cent more importance in its relation to the total debt of the section." No attempt has been made to discover to what extent these activities are self-sustaining.

Debts for non-productive purposes include, in order of importance, those for schools, recreation, highways, sewers, bridges, building, protection (fire and police), war (a heritage of the Civil War which had disappeared in 1912), railroads and other aid, funding and refunding. Per capita educational expenses were, as we would expect, greater in 1912 than in 1880 and larger in the North Atlantic and Western sections than in the South.

The summary of the book points out: first, the noticeable increase in number of cities that report debts for the same purposes; second, the growth of total indebtedness in the North Atlantic and Western sections as compared with the static condition in the North Central section; and third, the fact that the per capita burden of indebtedness tends to increase with the growth of population.

Mr. Clark has done a careful, lucid piece of work. There are numerous valuable tables throughout the text and detailed statistics in the appendix. The bibliography is of necessity limited. A very wise suggestion is implied in several places—the need of more efficient accounting methods and of similarity in items included under the term "miscellaneous."

ROY G. BLAKEY.

University of Minnesota.

Economic Protectionism. By JOSEF GRUNZEL. Edited by EUGEN VON PHILIPPOVICH. Carnegie Endowment for International Peace. Division of Economics and History. JOHN BATES CLARK, Director. (Oxford: At the Clarendon Press; London, Edinburgh, New York, Toronto, Melbourne and Bombay: Humphrey Milford. 1916. Pp. xiii, 357. 8s. 6d.)

This book is a defense of protectionism as a national commercial policy.

Economic protectionism, as viewed by the author, is "neither

more nor less than the sum total of the measures adopted by the national-economy unit [the politically organized state] for the purpose of advancing its interests in the field of world economy." The measures here referred to, however, embrace, as will presently be shown, not only import duties but also numerous other devices ordinarily not considered in discussions on protectionism. Consequently, the volume before us is more comprehensive than the usual work on the same subject, and includes a consideration of a greater range of topics than one might naturally anticipate.

The book is divided into three parts dealing respectively with the genesis of protectionism, the direction which it assumes, and its effects. The first part consists largely of an analytical and historical presentation of the origin of protectionism as a commercial policy. Aside from certain interesting tables of European economic divisions and customs districts of the world, this part contains little new material. The second part comprises a formal discussion of protective measures as they affect commodities, capital, and labor. Both negative and positive measures are elaborated. The negative measures protecting commodities are customs duties; the manipulation of freight rates; governmental administrative measures adopted primarily for sanitary or hygienic purposes but which, nevertheless, afford a certain degree of protection to domestic industries; concerted popular action, such as boycotting foreign goods in the interest of the greater consumption of the home product. Among the positive measures which result in commodity protection are export bounties; special freight rates on exports; and measures for encouraging shipping. Similarly, protection to capital is accomplished, on the one hand, by regulations designed to discourage its leaving the country and, on the other, by making it attractive for foreign capital to be brought in for investment. Likewise, the labor market is protected by negative and positive legislation designed to manipulate both immigration and emigration. A discussion is undertaken of various theories whose common aim is to justify protectionism as a commercial policy. The author, with slight reservation, subscribes to the "defensive" or "national" theory, and all other theories proposed come in for more or less criticism.

Part three is a brief presentation of the effects of economic protectionism. The conclusion reached by Grunzel is:

The protective policy promotes the economic development of a country as it makes possible an industrialization which is not the result

of natural conditions but of the productive energy of its civilization. It increases the activity of a country in world-trade for the reason that an industrialized nation cannot rest content with domestic markets, but requires exportation in order to secure that minimizing of risk which is so valuable in every field of modern economic life. The more active participation in world-economic relations increases indeed the dependency of each country upon its neighbors, but at the same time it lessens the danger of this dependency by distributing both purchases and sales among many economic domains. It is true that conflicts of interest arise from the clashing of the protective policy measures of different countries, but, in view of a steady community of interest, these show themselves on the road to settlement by international agreement.

This volume is among the first to be published by the Division of Economics and History of the Carnegie Endowment for International Peace. These publications are under the general direction of a Committee of Research embracing economists, statesmen, and others, most of whom participated in a conference held in Switzerland in 1911. As would appear from an introductory note, neither this volume nor others which are to follow commits the Carnegie Endowment as a body or as individuals to the opinions expressed by the respective authors. Such opinions are neither approved nor condemned by the fact that they are printed by the Carnegie Endowment, but it is understood that the monographs are believed to be of such a character as to merit careful perusal.

AVARD L. BISHOP.

Yale University.

NEW BOOKS

BANCROFT, H. *Inheritance taxes for investors. Some practical notes on the inheritance tax laws of each of the states of the United States, with particular reference to their application to non-resident investors.* Second edition revised to January 1, 1917. (Boston: Houghton Mifflin. 1917. Pp. 133. \$1.)

DONALDSON, J. L. *State administration in Maryland.* Johns Hopkins University studies in historical and political science, series XXXIV, no. 4. (Baltimore: Johns Hopkins Press. 1917. Pp. 155. \$1.)
Contains a chapter on finance (pp. 80-105).

DURELL, A. J. V. *The principles and practice of the system of control of parliamentary grants.* (London: Gieves Pub. Co. 1917.)

FILLEBROWN, C. B. *The principles of natural taxation. Showing the origin and progress of plans for the payment of all public expenses from economic rent.* (Chicago: McClurg. 1917. Pp. xx, 281. \$1.50.)

GARDNER, P. W. *Summary of tax laws affecting individuals and corporations in Rhode Island.* (Providence: Union Trust Co. 1917. Pp. 44.)

- HAVY, A. *Rapport sur les réformes à apporter au régime économique de la France.* (Paris: 1 place de Valois. 1917. Pp. 136.)
- HIGGS, H. *National economy. An outline of public administration.* (London: Macmillan. 1917. 3s. 6d.)
- JAMES, H. G. *Municipal functions.* National Municipal League series. (New York: Appleton. 1917. Pp. xi, 369. \$2.)
- JAY, P. *Impôts nouveaux. Impôts modifiés ou supprimés.* (Paris: 69 rue d'Aboukir. 1917. 4 fr.)
- JÈZE, G. *Les finances de guerre de l'Angleterre, 2^e supplément. La politique des économies.* (Paris: Giard & Brière. 1917.)
- KAHN, O. H. *Some comments on war taxation.* (New York: 52 William St. 1917. Pp. 33.)
- KLIPSTEIN, E. C. *Coal tar dyes in the tariffs of the United States.* (East Orange, N. J.: E. C. Klipstein. 1916. Pp. 56.)
- LEAUTEY, L. A. and LESEURRE, A. *La taxation des bénéfices de guerre et l'unification des bilans.* (Paris: Librairie Comptable et Administrative. 1917.)
- LECOUTURIER, H. *Impôt général sur le revenu.* New edition, revised. (Paris: Hugonis. 1917. Pp. 300. 12 fr.)
- MERCIER, A. *L'impôt sur le revenu, manuel du contribuable.* New edition. (Paris: Roustan. 1917. 4 fr.)
- MERCIER, A. *Les impôts en 1917, commentaire.* (Paris: Roustan. 1917. 1.50 fr.)
- MORAWETZ, V. *Proposed war taxation and the bond issue.* Reprint of a letter on war taxation published in the *New York Times*, April 19, 1917. (New York. 1917. Pp. 10.)
- NORTH, F. A. *The income tax under United States and Massachusetts law.* (Boston: Johnson & North. 1917. Pp. 139.)
- PERRY, J. E. *Practical working of the Massachusetts income tax.* (Boston: Merchants National Bank. 1917.)
- PRENDERGAST, W. A. *The extension of municipal activities and its effect on municipal expenditures, including a review of the budgets of New York City since consolidation, 1898-1917.* (New York: M. B. Brown Printing & Binding Co. 1917. Pp. 65.)
- RAVIART, E. *L'impôt général sur le revenu, guide du contribuable.* (Paris: Rousseau. 1917. 2 fr.)
- SEITZ, H. K. *Schweiz. Anleihepolitik in Bund, Kantonen und Gemeinden.* (Zurich: Institut Orell Füssli. 1915. Pp. 285.)

This volume supplements very usefully Steiger's well-known work upon the finances of Swiss cantons and communes, which gave little attention to the subject of public debts. The ante-bellum situation was a comparatively favorable one. Debts had increased, and very

largely, during the last sixty years; but, of the total outstanding in 1910 (2,700,000,000 francs), about 80 per cent had been incurred for productive purposes, while those representing unproductive outlays (552,000,000) imposed a per capita burden of 147 francs. In general it can be said that borrowing has been largely confined to productive purposes, and that unproductive outlays have been met principally out of ordinary revenues.

Dr. Seitz considers in great detail the laws governing the subject, the forms of loans and method of issue, the conversion and amortization of debts, and the markets (local and foreign) for Swiss securities. He has collected a large amount of historical materials of great interest and value, of which those relating to the growth of debts, rates of interest, and the market for Swiss securities, may be singled out for special mention. France is the chief foreign creditor, and in late years few Swiss securities have been held in Germany. Swiss capitalists have been taking a large part, or even the whole, of the more recent loans; so that Swiss finance has not required the aid of the foreign investor. Since 1913 the home market has demonstrated its capacity by absorbing the whole of several large issues.

C. J. BULLOCK.

SELIGMAN, E. R. A. *The House revenue bill. A constructive criticism.* Columbia war papers, series I, no. 16. (New York: Division of Intelligence and Publicity of Columbia University. 1917. Pp. 22.)

SMITH, W. McC. *The Massachusetts income tax, its requirements and workings.* (Boston: The author. 1917. Pp. 23.)

SNELLING, W. E. *Excess profits (including excess mineral rights) duty and levies under the munitions of war acts; incorporating the provisions of the income tax acts made applicable by statute and by regulation; also the regulations of the Commissioners of Inland Revenue and of the Minister of Munitions.* Second edition, revised and enlarged. (New York: Pitman. 1916. Pp. 152. \$3.)

VIDAL, E., DE NOUVION, G., and others. *Les finances au service du pays; études sur les questions et problèmes financiers actuels.* (Paris: Tenin. 1917. 7.50 fr.)

WHITE, J. D. *Land-value taxation and feu-duties.* (Glasgow: J. Maclehose & Sons. 1916. Pp. 23. 3d.)

WILLOUGHBY, W. F., and others. *The system of financial administration of Great Britain.* (New York: Published by D. Appleton & Co. for the Institute for Government Research. 1917. Pp. xv, 361. \$2.75.)

YOUNG, L. E. *Mine taxation in the United States.* (Urbana: Univ. Illinois. 1917. Pp. 275. \$1.50.)

Bender's federal revenue law, 1916; the revenue act of September 8, 1916, with notes and commentaries; also, federal taxation in general. (Albany, N. Y.: Matthew Bender & Co. 1917. Pp. xi, 427. \$4.)

- The excess profits tax law; act approved March 3, 1917.* (New York: Guaranty Trust Co. 1917. Pp. 18.)
- The federal estate tax law and regulations (United States inheritance tax). Act of September 8, 1916; amended March 3, 1917.* (New York: Guaranty Trust Co. 1917. Pp. 53.)
- Income tax. How to claim repayment of income tax for 1916-17.* (London: Mathieson. 1916. Pp. 94. 1s.)
- The investment tax law and the mortgage tax law of the state of New York, as amended in 1917.* (New York: Guaranty Trust Co. 1917. Pp. 61.)
- Interborough finance, present and future, with especial reference to conditions when the new lines shall have been completed; including synopsis of the financial structure of Interborough Consolidated Corporation.* (New York: Van Emburgh & Atterbury. 1917. Pp. 69.)
- Mobilizing money for war.* (New York: Guaranty Trust Co. 1917. Pp. 12.)
- Proceedings of the sixth state conference on taxation, held Feb. 1-2, 1917.* (Lansing: Michigan State Tax Association. 1917. Pp. 118.)
- Prospectuses of the three war loans of the United Kingdom.* (New York: National Bank of Commerce. 1917.)
- War finance primer.* (New York: National Bank of Commerce. 1917. Pp. 136.)

Population and Migration

NEW BOOKS

- ABBOTT, G. *The immigrant and the community.* (New York: Century Co. 1917. Pp. 303. \$1.50.)
- HERSCH, L. *La mortalité chez les neutres en temps de guerre.* (Paris: Giard & Brière. 1915. Pp. 36.)
- ROBINSON, W. J. *Eugenics, marriage and birth control.* (New York: Critic and Guide Co. 1917. Pp. 208. \$1.)
- STEINER, J. F. *The Japanese invasion; a study in the psychology of inter-racial contacts.* (New York: McClurg. 1917. \$1.25.)
- WARD, J. M. *The immigration problem; or, America first; a brief treatise explaining how hundreds of thousands of foreign cheap laborers are annually brought to the United States under the guise of immigrants, and urging the need of more stringent laws to check this growing evil and protect American labor.* (Poplar Bluff, Mo.; Republican Prtg. Co. 1917. Pp. 110.)
- Births, deaths, and marriages, England and Wales. Report of Registrar-General for 1915.* (London: King. 1917. 5s.)
- The blind in the United States, 1910.* (Washington: Bureau of the Census. 1917. Pp. 342.)

Mortality statistics, 1915. (Washington: Bureau of Census, 1917. Pp. 707.)

Ten years of work, 1907-1916. Report of work in reducing the infant death rate of New York City. (New York: New York Milk Committee, 1916. Pp. 38.)

Social Problems and Reforms

The Minimum Cost of Living. A Study of Families of Limited Income in New York City. By WINIFRED STUART GIBBS. (New York: The Macmillan Company, 1917. Pp. xv, 93. \$1.00.)

The subtitle of this useful book is: A Study of Families of Limited Income in New York City. It is an accurate laboratory contribution to family budget literature, of use to every student of social conditions. Further, it demonstrates the practicability of using the family budget as a lever to raise the living standards both of dependent and of independent families, and will, therefore, be of service to every social worker. Both the work done and this effective publication of the results are achievements of the New York Association for Improving the Condition of the Poor, in full accord with its generally constructive policy in dealing with dependence.

Miss Gibbs for ten years has been in charge of this association's active Division of Home Economics. In this volume she presents, with grateful clarity and brevity of statement, a story of family budget making, carried on with detailed care, during the past two years, by seventy-five selected families on the dependent list of the association. All of these were families of widows, with children, to which the association was providing steady incomes.

These families were taught to keep classified expense accounts (the association developed, three years ago, a simple, practical family budget book for use by such families) that teachers of cooking and sewing might the better instruct them to make wise use of their limited incomes.

Miss Gibbs divides her story of these seventy-five family budgets into three parts. In part I, after telling of the method employed in making the study, she devotes a chapter to The Estimate of Minimum Requirement. Tabulated details of estimates to cover shelter, food, fuel and light, clothing and sundries, show the reader beyond any doubt that, as stated by the author, the estimates are on a "minimum basis—the lowest sum on which families could maintain health and working power" (p. xiv).

Part II tabulates the seventy-five expense accounts in detail, family by family, covering for each of the budget headings, estimate of needs, actual expenses, actual incomes and year's deficits or surpluses (pp. 31 to 45).

Part III states the results. It opens with a chapter which tells the condition of the families both before and after receiving steady income and instruction in its best use. Chapters follow, describing in some detail and with selected illustrative tables, the results with reference to housing, food, clothing, firing, lighting, and incidentals. This clear story of results convinces the reader not only that the trained staff of this association has made its budget method work among these dependent families, but also that Miss Gibbs is justified in her conclusion that this method might be applied with social gain to independent families. Miss Gibbs thus states this conclusion: "The intensive work described in these pages has shown that it would be well worth while for neighborhoods and communities to undertake systematic coöperation for the purpose of building for future strength. Every family that learns to attain its potential best, physical, mental and spiritual, is a strong power . . . Conservation of all resources among independent families reduces to a minimum the number on the verge of the so-called poverty line" (pp. 92-93).

WALTER E. CLARK.

The College of the City of New York.

Vocational Education Survey of Minneapolis, Minnesota. Made by the NATIONAL SOCIETY FOR THE PROMOTION OF INDUSTRIAL EDUCATION. Bulletin of the United States Bureau of Labor Statistics, Whole No. 199, December, 1916. Vocational Education Series, No. 1. (Washington: Superintendent of Documents. 1917. Pp. 592. 65 cents.)

Two special features distinguish the survey made by the National Society for the Promotion of Industrial Education in Minneapolis during 1915 and now available in a revised edition published by the United States Bureau of Labor Statistics.

In the first place, the admirable policy has been established by this society of holding its annual convention in a city which agrees to conduct for its own benefit a vocational education survey in coöperation with the society. Mr. A. Lincoln Filene, of Boston, is the author of this fruitful idea. One result has been to focus the

interest of employers and educational administrators at the annual sessions mainly on the findings and problems formulated by the investigations which have been under way.

The second outstanding feature of the report is its group of trade agreements, successfully effected by Dr. Prosser, whereby the proposed vocational courses are to be undertaken in coöperation with representative trade committees of employers and employees.

The Minneapolis survey marks an important step forward in properly supervised, and, one may say, socialized vocational education. A portion of this survey is given over to discussion already familiar to students of educational and economic readjustment, reënforced, however, by the clearest and best analyzed occupational studies thus far presented in any American study of the relation between school and work.

To describe it as a summary of the result of a year of elaborate investigation into the principal industries of a large city, presented in more than five hundred closely printed pages, would hardly do justice to the present volume. In it may be found minute information about the method of the survey, the extent to which the schools of Minneapolis are meeting the needs of the children headed for employment, how far private agencies and apprenticeship plans meet the needs for industrial preparation, a wealth of charted and well-analyzed statements of specific requirements in such occupations as building trades, the metal trades, woodwork, printing, flour milling, baking, laundry work, garment making, millinery, dressmaking, office work, knitting mill operating, agriculture, and store salesmanship.

One practical outcome of this study is the well-endowed and successful Dunwoody Institute for trade training in Minneapolis. Another, and perhaps more far-reaching, is the influence which this report has had on vocational education policies throughout the country. With the Smith-Hughes bill, now law, providing for federal aid to vocational training in the states, the present survey, and indeed all the other surveys and publications of the National Society will supply the necessary guidance, and above all the viewpoint which will forward the work of educational and industrial reconstruction through vocational training.

MEYER BLOOMFIELD.

NEW BOOKS

- BEMAN, L. T. *Selected articles on prohibition of the liquor traffic*. Second edition, revised. Debaters' handbook series. (White Plains, N. Y.: Wilson. 1917. Pp. 237. \$1.25.)
- BENNETT, H. M. *Women and work; the economic value of college training*. (New York: Appleton. 1917. Pp. 286. \$1.50.)
- BLUE, F. O. *When a state goes dry; a brief study in law enforcement*. (Westerville, O.: American Issue Pub. Co. 1916. Pp. 114. 75c.)
- BREWER, J. M. and KELLY, R. W. *A selected critical bibliography of vocational guidance*. Harvard bulletins in education, no. IV. (Cambridge: Harvard University. 1917. Pp. 73. 50c.)
- DAVIES, G. R. *Social environment*. (Chicago: McClurg. 1917. Pp. 149. 50c.)
- D'AETH, F. G. *The juvenile adult problem*. (London: Humphrey Milford. 1917. Pp. 10. 4d.)
- EUBANK, E. E. *A study of family desertion*. (Chicago: Dept. of Public Welfare. 1916. Pp. 73.)
- FERRI, E. *Criminal sociology*. Translated by J. I. KELLY and J. LISLE. Edited by W. W. SMITHERS. Modern criminal series. (Boston: Little, Brown. 1917. Pp. 577. \$5.)
- HARRIS, L. I. *The municipality in industrial hygiene; new methods for the protection of public health in New York City. First annual report of the Division of Industrial Hygiene, Department of Health, New York City*. (New York: Scientific American. 1917.)
- JACOBS, C. L. *A vocational guidance bibliography compiled for the commissioner of industrial and vocational education*. (Sacramento: California State Board of Education. 1916. Pp. 24.)
- MACCARTHY, J. H. *Where garments and Americans are made; story of Sicher system of factory education for Americanization of foreigners, conducted in coöperation with New York Board of Education—a challenge to hyphenatism*. (New York: Writers' Pub. Co. 1917. Pp. 57.)
- MORRIS, M. *The nation's health*. (New York: Funk & Wagnalls. 1917. Pp. 152. \$1.25.)
- PICKARD, A. E. and HENEGREN, M. C. *Industrial work for girls*. (St. Paul, Minn.: Webb Pub. Co. Pp. 140.)
- RAHILLY, A. *A guide to books for social students and workers*. University and labor series, no. 1. (London: King. 1917. 3d.)
- RICHMOND, M. E. *Social diagnosis*. (New York: Russell Sage Foundation. 1917. Pp. 511. \$2.)
- ROBINSON, E. *Vocational education and guidance of youth; an outline for study*. (White Plains, N. Y.: Wilson. Pp. 66. 35c.)

- TREADWAY, W. L. *The feeble-minded. Their prevalence and needs in the school population of Arkansas.* United States Public Health Service reprint no. 379 from the Public Health Reports. (Washington: Superintendent of Documents. 1917. Pp. 19.)
- DE VESSELITSKY, V. *Expenditure and waste.* (London: Bell. 1917. 8d.)
- WALTON, C. *Welfare study.* (London: Maclure, Macdonald. 1917. Pp. 24. 6d.)
- WARD, H. F. *The labor movement from the standpoint of religious values. The verbatim stenographic report of a series of lectures delivered at Ford Hall, Boston, together with the questions and answers of the forum period following each lecture.* (New York: Sturgis & Walton. 1917. Pp. 199. \$1.25.)
- WILLIAMS, W. S. *The problem of the unemployed.* (Boston: Gorham Press. 1917. Pp. 106. \$1.)
- Cleveland conference of illegitimacy and its committees.* (Cleveland, O.: The Cleveland Federation for Charity and Philanthropy. 1916. Pp. 19.)
- Preliminary report to the mayor and alderman.* (Chicago: Chicago Commission on the Liquor Problem. 1916. Pp. 65.)
- The prevalence of venereal diseases in Canada. A presentation of facts and figures.* *Conservation Commission of Canada.* (Toronto: University of Toronto Press. 1917. Pp. 21.)
- First year's work of the Institute for Public Service. November, 1915, through December, 1916.* (New York: 51 Chambers St. 1917. Pp. 63. 50c.)
- How two thousand Detroit mothers were cared for in childbirth.* (Detroit: Committee on Maternity Survey of the Detroit Home Nursing Association. 1916. Pp. 22.)
- Second biennial report of the Industrial Welfare Commission of the State of Oregon, 1915-1916.* (Salem: State Prtg. Dept. 1917. Pp. 57.)
- The second social year book. The human problems and resources of Cleveland, sixth city.* (Cleveland, O.: Cleveland Federation of Charity and Philanthropy. 1916. Pp. 125. 35c.)
- Social service guide to workers.* (Birmingham, Eng.: Birmingham and Midland Brotherhood Federation. 1917. Pp. 79. 2d.)
- The sociology of rural life. Papers and proceedings of the eleventh annual meeting of the American Sociological Society, held at Columbus, Ohio, December 27-29, 1916.* (Chicago: Univ. Chicago Press. 1917. Pp. 233. \$1.50.)

Insurance and Pensions

The Principles of Insurance. Volume I. *Life.* By W. F. GEPHART.
(New York: The Macmillan Company. 1917. Pp. xi, 385.
\$1.50.)

It has not been generally appreciated that the life insurance business is one of the most important kinds of business in the country, being comparable in its magnitude to the banking or the railroad business. It is also probably the least understood of any of the more important kinds of business. Consequently, a book which gives an adequate survey of this business, giving both the practical standpoint and explaining the scientific foundations upon which it rests, is of much value. The present book does this and in a satisfactory way. It is written by one who knows insurance rather from the scholar's standpoint than that of the practical insurance man, and yet, in general, the practical side of the business is well treated.

There are two principal reasons why, notwithstanding the importance of life insurance, there is less general knowledge about it than about other kinds of business of at all comparable magnitude. One of these is the practical one of the way in which the average man comes in contact with the business, in that he obtains from the company a promise to pay a definite sum at his death (or, if an endowment, at some earlier date) and pays to the company a periodic premium for this. Such a relation is very different from, for instance, his relation with his bank, where he is constantly drawing checks, making deposits, having to keep watch of his balance, perhaps seeking accommodation in loans or discounts, or other favors. The other principal reason is that there are scientific principles underlying insurance which are understood by comparatively few of the general public; and without some conception of these principles it is not possible to really understand the business. A third reason might perhaps be added; namely, that the business is unlike any other kinds of business in that instead of selling a commodity the insurance company sells a promise to pay at some future time, the time itself depending upon the contingency of death, so that the obligations of the company are not present but rather the future obligations of having the proper funds in hand when the promises to pay mature.

It is important that a more general knowledge of the fundamentals of life insurance should be disseminated, since the lack of real

information frequently means misinformation; even if for no other reason this would be important in the question of legislation, for there are no kinds of business except banking and transportation which are so regulated and supervised by the state as insurance. This regulation can either serve the public or do great harm to the public according as it is wise or unwise; and much of the unwise regulation that has thus far been enacted has resulted from lack of knowledge.

Mr. Gephart has well met the problem. His book is simple and readable and yet broad, and adequate to give not only an understanding of the fundamental principles but a great deal of the practical business side. Its wide scope is shown by an enumeration of some of the subjects it takes up: the history of life insurance, mortality tables, the scientific foundations of the business, the kinds of life insurance contracts, the selection of risks and some of the special classes as regards mortality, what the reserve is and how it is entirely different from a bank reserve, surplus and dividends and the problems connected therewith, investments of life companies, insurance for wage-earners, the relation of the state to insurance.

The book avoids a difficulty which sometimes occurs when those outside of the business attempt to write about it: namely, the difficulty of supporting theories which, for practical reasons, are unworkable. In life insurance one of the most common of these is the theory of saving to the company the expense caused by agents' commissions, which has been tried many times and without success. The nearest approach to success has been achieved by the Equitable Insurance Company of London, one of the oldest companies in existence and one which has had an exceedingly honorable history. Yet it issues less insurance in a year than one of the large American companies issues in a week, and in its premium rates and returns to policyholders is about on a par with other British companies which do employ agents.

A very valuable feature of the book is that it brings out forcefully the true nature of life insurance; that it is not an investment or a proposition into which the insured goes for profit, but that it is a coöperative scheme in which a large part of the work of the company is to distribute among many the cost which is in any case entailed on the public by the mortality.

The arrangement is a little unfortunate. The book begins with a history of life insurance, then takes the theory of life insurance,

the mortality tables, selection of lives, etc. Inasmuch as the average person knows very little about what the business of life insurance is and what it does for the policyholder, the reader should first be told what the business he is reading about has for sale, rather than what are its scientific foundations and what has been the history of its products. Afterwards these latter subjects will be of greater interest and will have more meaning.

There are some errors in the book that should not have been made. On page 146 it is stated that the renewal commissions are now commonly limited to the first seven years of the policy; whereas they usually either run for a longer term than this or are commuted into three years. On page 249 it is said that "*many* states have considered it necessary to lay down the limit of expense for new business"; whereas there are two only, New York and Wisconsin. Such errors are mostly in detail and do not greatly affect the value of the work. There is, however, one serious omission. While most of the well-known mortality tables are fully treated, a table which is more important than almost any other, and which was constructed from the most extensive investigation ever made for any general mortality table founded on insured lives, the British Offices table, is entirely passed over. Furthermore, on page 63 it is stated that the Combined Experience table is the one now generally in use in England, whereas it is the British Offices tables which are in general use.

WENDELL M. STRONG.

The Principles of Insurance. Volume II. Fire. By W. F. GEPHART. (New York: The Macmillan Company. 1917. Pp. xi, 332. \$1.50.)

Fire underwriters have often complained that a business with which only a few others are comparable in point of size, universality, and importance, should have received from the public so little intelligent study. Their thirty million policies represent an average of about one and one-half for each family in this country, and aggregate a total of more than sixty billion dollars of fire insurance in force; and yet there are probably ten men who can intelligently discuss banking or railroading to every one who is really conversant with the problems of underwriting. For this reason, the volume under consideration is of unusual importance.

Professor Gephart's work takes the form of a student's textbook. It is written from the viewpoint of an economist rather than

of a technician, and properly so, since it is intended for the general student. It bears evidence of painstaking accumulation of data, and deliberate, intelligent appraisal of values. It would be too much to claim that the author has entirely mastered a subject of which the depths have by no means been sounded by those who spend their lives in the work or that all of his statements would pass without challenge from underwriters, but it is certain that he has written a clear, interesting, and admirably balanced study of the principles of fire insurance.

It is in its clarity and sense of proportion that this volume is particularly noteworthy. A subject so extensive and containing such elements of complication has naturally led to specialization among underwriters, and those among them who have published books, have generally dealt with some one of the phases—such as the actuarial, administrative, financial, legal, or engineering problems. Most of them lack the perspective of an outsider; and when this outsider is equipped with a trained mind and a sincere purpose, both evident in this book, his labors are of value.

The volume in question opens with a brief survey of the history of fire insurance, necessarily much fore-shortened, but sufficient for an introduction. From this point, the author proceeds to a statement of economic principles, such as those involved in the relation of fire insurance to production, to credit, to distribution, and to its general background of American fire losses. He negatives the occasional charge, that fire insurance is a monopoly, and says: "As the business is at present conducted, its very character induces excessive competition and this natural tendency is aided by mistaken legislation which has for its purpose the placing of a premium on competition by the companies."

After chapters upon business organization and methods, Professor Gephart enters into a consideration of the highly technical questions of hazard and rate making, which are viewed by many students as constituting the most complicated problem known to business finance. This ground is much controverted, as the author fully recognizes, but his definitions and statements of principles are substantially correct, and he notes the earnest efforts of the underwriters to work out rates which shall correspond as closely as possible to the exact degrees of hazard involved in all risks. In this connection he makes particular references to the establishment of the Actuarial Bureau of the National Board of Fire Underwriters for the purpose of compiling and analyzing

national fire loss statistics. He is obviously a disbeliever in the value of state rate making as compared with public supervision.

Other chapters deal with the policy contract, limitation of liability, and the finances of fire insurance, and the author presents a brief summary of the fire prevention efforts being made through the National Board and other instrumentalities.

The last chapter is devoted to the well-fought field of the relation of the state to insurance. In this chapter it is interesting to note that Professor Gephart reaches independent conclusions similar, on the whole, to those long held by the leading underwriters. He says that "the popular notions and sophisms of insurance are to be found in the case of scarcely any other business"; and he notes as "popular fallacies" the ideas that "the public can benefit in price by encouraging and compelling independent action on the part of all companies in selling their commodity," "that insurance is a business suited for profit taking," "that insurance is a peculiarly profitable business for those engaged in it," and that insurance companies can be expected to pay "from some mysterious source sums far in excess of the premiums paid them and their earnings."

His general conclusions are expressed in his closing words: "Whatever reforms are needed can be best accomplished by the fire insurance companies themselves. A greater degree of coöperation with the ends in view of restricting undesirable competition and of devising standards for the business, is the great need of the fire insurance business."

In point of copy-reading, the volume leaves something to be desired. For example, The National Board of Fire Underwriters is occasionally referred to as "The National Board of Underwriters" and once as "The National Board of Fire Indemnities."

WILBUR E. MALLALIEU.

NEW BOOKS

COMBAT, F.-J. *Les assurances et la guerre (1914-1915)*. (Paris: Berger-Levrault. 1917.)

CORNELIUS, M. P. *Accidental means; a brief on the insuring clause of personal policies*. Revised and brought down to December, 1916. (New York: Hine Bros. 1917. Pp. 118. \$3.)

DEITCH, C. A. *Digest of insurance cases. Volume 29, for the year ending October 31, 1916*. (Indianapolis: Rough Notes Co. 1916. Pp. xlv, 596.)

- DUDLEY, W. A. *Finance and life insurance*. (Mexico, Mo.: Missouri Prtg. & Pub. Co. 1916. Pp. 227. \$5.)
- GENET, G. *De l'importance économique de l'organisation et du fonctionnement en France des compagnies anonymes françaises d'assurances à primes fixes contre l'incendie, étude économique, historique et juridique*. (Paris: Fontemoing. 1917. 7.50 fr.)
- HARDY, E. R. *Insurance*. (New York: Alexander Hamilton Inst. 1917.)
- HONNOLD, A. B. *A treatise on the American and English workmen's compensation laws as interpreted by the courts and tribunals vested with the power of administering and enforcing same*. (Kansas City, Mo.: Vernon Law Bk. Co. 1917.)
- HORNER, W. M. *Training for a life insurance agent*. (Philadelphia: Lippincott. 1917. \$1.25.)
- HUEBNER, S. S., editor. *Modern insurance problems*. (Philadelphia: Am. Acad. Pol. Soc. Sci. 1917.)
- JACKSON, J. A. *Easy lessons in life insurance for life insurance agents, laymen and company officials*. (Newark, N. J.: Baker Prtg. Co. 1917. Pp. 146. \$1.50.)
- JOYCE, J. A. *Joyce on insurance*. (Rochester, N. Y.: Lawyers Coöperative Pub. Co. 1917. 5 vols. \$37.50.)
- KISER, D. J. *Workmen's compensation acts; a corpus juris treatise*. (New York: Am. Law Bk. Co. 1917. Pp. 146.)
- LARTER, A. E. *The L. & L. rating system, designed to effect standardization of fire insurance rating, based upon an analysis of conditions contributing to the fire loss*. (New York: Evening Post. 1917. Pp. 80.)
- PEARSON, B. *Policy forms. Series B*. (Louisville, Ky.: Insurance Field Co. 1917. Pp. 35. \$1.)
- ROE, E. T. *Workmen's compensation laws for personal injury sustained while working*. (Chicago: P. F. Pettibone & Co. 1917. Pp. 45.)
- SHERMAN, P. T. *Criticism of a tentative draft of an act for health insurance "submitted for criticism and discussion by the committee on social insurance of the American Association for Labor Legislation"*. (New York: Roy Press. 1917. Pp. 93. \$1.)
- Analysis of causes of invalidity in respect to claims under the invalid and old-age pensions act*. (Melbourne, Australia: A. J. Mullett. 1916. Pp. 20.)
- Benefit and pension plans for the employes of International Harvester Companies. Revised issue of June 1, 1916*. (Chicago. 1917. Pp. 50.)
- Non-contributing old age pensions and health insurance. Report of the*

special committee on social insurance. (Boston: Boston Chamber of Commerce. 1917. Pp. 14.)

The pension problem and the philosophy of contributions. Bureau of Municipal Research, New York City. (New York: Pension Pub. Co. 1917. Pp. 20.)

The standard fire insurance policy and loss adjustment lectures. (New York: Ins. Soc. of N. Y.)

Summary of report on workmen's compensation acts in the United States. The legal phase. (Boston: National Industrial Conference Board. 1917. Pp. 8.)

Pauperism and Charities

NEW BOOKS

BERCOVICI, K. *Crimes of charity.* (New York: A. A. Knopf. 1917. Pp. 271. \$1.50.)

GUILD, F. H. *State supervision and administration of charities.* Indiana University studies. (Bloomington, Ind.: Indiana Univ. 1917.)

Socialism and Co-operative Enterprises

Profit Sharing in the United States. By BORIS EMMET. Bulletin of the United States Bureau of Labor Statistics, Whole No. 208, December, 1916; Miscellaneous Series, No. 13. (Washington: Superintendent of Documents. 1917. Pp. 188. 20 cents.)

There has been abundant evidence in recent years of a revival of interest of employers in schemes of profit sharing, and there have been several attempts to bring together in one statement a description of the more notable existing schemes. There have also been numerous articles descriptive of particular schemes. The difficulty with this literature has been its partial and occasional character, its lack of perspective. Mr. Emmet's report covers somewhat the same ground as the report of the Civic Federation, but is more broadly managed. It claims to have "carefully examined and analyzed . . . all of the profit sharing plans known to be in operation in the United States at the present time" and, in addition, to have studied sundry other plans not accurately described as profit sharing. Besides thus throwing light upon the extent of profit sharing in the United States, it examines the character of the schemes with reference to the factors which determine what profits are to be distributed and to the conditions under which payments are made to employees. It studies the proportion of the working force who participate; the occupations

and types of employment of the participating workmen; the kind of benefits which accrue by virtue of participation; the cost of the plans to the employers, and, finally, the results secured. Apart from this comprehensive treatment there is a detailed examination of several bonus plans which pass for profit sharing.

All of this constitutes a body of fact and exposition of much value. But here the utility of the study may be said to end. There is, indeed, a final section entitled "Extent to which objects sought by establishment of profit sharing plans have been realized," but the section runs to only three pages and is meager. Although it is hardly to be expected that a government study should attempt to enter into the philosophy of its subject, there is a good deal more that this bureau report might have accomplished. Its study of the results of profit sharing is based entirely upon reports from employers. It does not appear that the state of mind of employees has been directly taken into account. Less than three pages is given to a discussion of discontinued plans, yet these pages indicate that in one way or another collapse was due to discontent of the employees. Beyond question, one difficulty which in the past has limited the development of profit sharing has been the narrow tendency of employers to regard the workmen's interests as wholly incidental to their own. The present report does not improve upon this point of view. We must be grateful for so careful a compilation and analysis of the plans in existence in the United States, but we have still to hope for a study which will show us profit sharing from the inside, as it appears to the workers as well as to the managers of industry.

ROBERT F. FOERSTER.

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NEW BOOKS

BARNHILL, J. B. *One hundred best anti-socialist books.* (Washington: Anti-Socialist Bk. Co. 1917. Pp. 8. Gratis.)

CROSTHWAITE, H. R. *Coöperation: comparative studies and the central provinces system.* (Calcutta: Thacker, Spink & Co., for the Central Provinces Federation of Coöperative Banks. 1916. Pp. 542. 6 Rs.)

GHEENT, W. J. *Appeal socialist classics.* (Girard, Kan.: Appeal to Reason. 1916. 25c.)

KAMMAN, W. F. *Socialism in German American literature.* (Philadelphia: Americana Germanica Press. 1917. Pp. 124.)

MUKHERJI, P. *The coöperative movement in India*. (Calcutta: Thacker, Spink & Co. 1916. Pp. xx, 453.)

PERKY, C. W. *Coöperation in the United States*. (New York: The Intercollegiate Socialist. 1917. Pp. 31.)

THOMPSON, C. D. *Municipal ownership*. (New York: Huebsch. 1917. Pp. 114. \$1.)

Statistics and Its Methods

NEW BOOKS

TAYLOR, J. M. *Ourselves. A personal and family history register for preserving records of a private and personal nature, of one married couple and their children, including an appendix on the development of children in mind, body, character, and personality*. (Philadelphia: F. A. Davis Co. 1917. \$5.)

The official year book of New South Wales, 1915. (Sydney: Bureau of Statistics. 1916. Pp. 990.)

Notes statistiques sur les céréales. (Rome: Inst. Intern. d'Agr. 1917.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

SOME PUBLIC AND ECONOMIC ASPECTS OF THE LUMBER INDUSTRY. For four long years nearly 5,000,000 people of the United States have been painfully aware that something is radically wrong with the lumber industry. Countless writers and platform speakers have offered diagnoses, but the first careful, comprehensive analysis is to be found in a public document, popularly known as Report No. 114 and entitled *Some Public and Economic Aspects of the Lumber Industry*, Studies of the Lumber Industry, part I, by William B. Greeley, assistant forester (Washington, Superintendent of Documents, January 24, 1917, 25 cents). The document is one of a series and was prepared through the collaboration of the Forestry Service, the Bureau of Foreign and Domestic Commerce, and the Federal Trade Commission, although for certain statements of fact and methods of presentation the latter body assumes neither credit nor responsibility.

While Mr. Greeley's survey includes the whole industry, certain salient features stand out clearly, among which may be mentioned: A public land policy under which great areas of standing timber were virtually given away on the same basis as common farming lands, thus paving the way for an eventual overstocking of the timber market; the buying of timber too freely by short-time investors; the overcapitalization of the lumber resources; the proneness of lumber manufacturers to spend their time and energy in timber speculations rather than in bringing the mill end of the business to a high point of efficiency; the growing competition of substitutes for lumber; and, lastly, the unstable nature of the lumber business.

The remedies proposed follow along three general lines: A separation of the investment and manufacturing phases of the industry; the adoption of more efficient methods of milling and marketing; and the extension of the National Forests to include many holdings which are now dead losses to their owners.

The study is very valuable because of the mass of data brought into compact form, because of the clarity and succinctness with which lumber activities are described, and because of the frankness used in depicting the illusions and pitfalls of the business. Every person contemplating purchasing timber lands, or building lumber mills, or investing in timber bonds, should first read this report.

The document, however, rests under a curse common to government reports. It was born too late to be of greatest service. The data

relate primarily to conditions up to 1914, and, if the report had been published three years ago, would have been of inestimable value. Today the situation, both from the material and psychological viewpoints, has changed. Hundreds and hundreds of mills have been swept out of existence, and thousands of investors ruined, yet, curiously enough, due to a set of unexpected circumstances, lumber prices are as high as they ever have been. This is explained by the general depletion of stocks in local yards and the inability of mills to supply this shortage due to lack of railroad cars, and to much sentimental talk of the vast amount of timber to be used in building emergency vessels during the present war. The victim, who by all the rules of the game, should have been dead and buried, is showing most astonishing signs of life. Perhaps these activities are but the proverbial rally which is to hasten his untimely demise, but timber dealers, shrewd in understanding human nature, are so busy preparing for heavy investments of Eastern capital that they have no time left to read of the ills of the industry. Thus, while Mr. Greeley's analysis will undoubtedly hold true over a period of years, its immediate importance is lost by a sudden reversal of conditions.

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The Bureau of Foreign and Domestic Commerce of the federal Department of Commerce has recently issued the following publications: In the Special Agents Series:

- No. 130, *Wearing Apparel in Japan* (pp. 134), by Stanhope Sams.
- No. 131, *South American Markets for Fresh Fruits* (pp. 163), by Walter Fischer.
- No. 132, *Markets for Paper, Paper Products and Printing Machinery in Cuba and Panama* (pp. 44), by Robert S. Barrett.
- No. 133, *Market for Boots and Shoes in Cuba* (pp. 46), by Herman G. Brock.
- No. 135, *Market for Boots and Shoes in Porto Rico* (pp. 28), by Herman G. Brock.
- No. 137, *Textiles in Porto Rico and Jamaica* (pp. 31), by W. A. Tucker.
- No. 138, *Cotton Goods in British India, Part III, Burma* (pp. 52), by Ralph M. Odell.
- No. 139, *Markets for Construction Materials and Machinery in Cuba* (pp. 61), by W. W. Ewing.

No. 140, *Markets for Agricultural Implements and Machinery in Brazil* (pp. 59), by Frank H. von Motz.

In the Miscellaneous Series:

No. 53, *The Cane Sugar Industry: Agricultural, Manufacturing and Marketing Costs in Hawaii, Porto Rico, Louisiana, and Cuba* (pp. 462).

No. 58, *Cotton Textiles: International Trade and Merchandising Methods* (pp. 19).

No. 59, *Methods of Computing Values in Foreign Trade Statistics* (pp. 23), by J. J. Kral.

In the Tariff Series:

No. 30A, *Supplement to Foreign Import Duties on Motor Vehicles and Accessories* (pp. 17).

The federal Bureau of the Census has made a *Study of Cartage Costs in the City of Washington*, prepared by Eugene F. Hartley (Washington, 1917, pp. 14). It is estimated that the total cartage cost for the city of Washington in 1916 amounted to \$8,300,000 as compared with \$7,250,000 for inbound freight. 128 establishments reported their costs, showing the cost of delivery to be 6.2 per cent of gross sales. For ice the delivered cost was 45 per cent; for bottled soft drinks, 20 per cent; for brick, 20 per cent; bakery products, 20 per cent; and laundered goods, 15 per cent. For department store merchandise the cost was 1.5 per cent and for milk it ranged from 12 to 10 per cent of the selling price.

An Economic Study of Farming in Sumter County, Georgia, published by the United States Department of Agriculture as Bulletin No. 492, is prepared by H. M. Dixon and H. W. Hawthorne (Washington, Feb. 10, 1917, pp. 64). It is based upon a study of 534 farms with particular reference to the economic significance of tenure, size of farm, farm organization, crop yield, and cost of cotton production.

Bulletin No. 476 of the Department of Agriculture is devoted to a *Study of Cotton Market Conditions in North Carolina with a View to their Improvement* (Washington, March 29, 1917, pp. 18).

Circular No. 66 of the Department of Agriculture summarizes *Suggestions for the Manufacture and Marketing of Creamery Butter in the South* (Oct. 25, 1916, pp. 11).

A letter from the Federal Trade Commission on the *News-Print Paper Industry* has been published as Senate Document No. 49, 64 Cong., 1 Sess. (Washington, June 13, 1917, pp. 162).

The Commission on Living Costs in Rhode Island, under date of January 29, 1917, published Part II on *Food Products* (Providence, pp. 21).

The State Bureau of Labor of Washington has made a compilation of *Comparative Statistics on Foodstuffs and Fuel* for four years as shown in a budget of the annual cost of living of a family of five persons (Olympia, Apr., 1917, pp. 3).

The development of farm markets in Idaho is discussed in the *Second Annual Report of the Director of Farm Markets* (Boise, Dec. 15, 1916, pp. 27). The *Laws Governing Farm Markets Department* as amended in 1917 have also been issued as a reprint (pp. 16).

The Canal Committee of the Chamber of Commerce of Buffalo, N. Y., has made a report on *Ship Channel between Lake Erie and Lake Ontario* (pp. 54). This reviews the history of inland waterways projects in relation to New York state, Lake Erie, and Lake Ontario.

Corporations

REPORT ON THE PRICE OF GASOLINE IN 1915. The Federal Trade Commission during the latter part of 1915 was deluged with complaints from all parts of the country, charging that the price of gasoline was unreasonably high and was discriminatory as between different purchasers. Though the commission was then conducting an investigation of the petroleum industry in all its phases, it deemed it in the public interest to undertake a special investigation. This report (*Price of Gasoline in 1915*, Washington, April 11, 1917, pp. xv, 224) is the result of that inquiry. Professor Lewis H. Haney greatly assisted in the preparation of the report, and the commission fittingly acknowledges his services.

We may pass over the statistical inquiry into the course of gasoline prices. The significant part of the report for economists lies in the findings of the commission as to the effectiveness of the dissolution decree of 1911 and in its recommendations for future legislation.

The conclusion of the commission was that in spite of the dissolution decree there was little, if any, competition between the former subsidiaries of the Standard Oil Company of New Jersey (the holding company) in the marketing of gasoline—the chief refined product of crude oil. The subsidiaries which are engaged in marketing gasoline are the Standard Oil Companies of New York, New Jersey, Kentucky, Ohio, Indiana, Nebraska, California, and Louisiana, the Atlantic

Refining Company, the Continental Oil Company, and the Magnolia Petroleum Company. The commission pointed out that these eleven Standard companies have with respect to gasoline "maintained a complete division of territory embracing the whole country and that almost without exception each Standard marketing company occupies and supplies a distinct and arbitrarily bounded territory." Thus, the Standard Oil Company of New York occupies the whole of New York state and of the New England states, but no other territory; the Atlantic Refining Company, the whole of Pennsylvania and Delaware, but no part of any other state; and the Standard Oil Company of New Jersey, the states of New Jersey, Maryland, Virginia, West Virginia, North Carolina, and South Carolina.¹ The only exceptions to this division of territory are found in Oklahoma and Arkansas. In Oklahoma—the territory of the Magnolia Petroleum Company—the Standard Oil Company of Indiana has a few tank-wagon stations in the northern part of the state; and in Arkansas the Magnolia Petroleum Company and the Standard Oil Company of Louisiana have stations. None of the "independent" concerns, it should be observed, have territories limited in this fashion. The Texas Company, for example, sells gasoline in thirty-two states and the District of Columbia, and covers ten of the eleven Standard marketing territories. The Gulf Refining Company, the Indian Refining Company, the National Refining Company, the Pure Oil Company, and the Cudahy Refining Company all do business in at least two of the Standard marketing territories, and are able to make profits in competition with each other and the Standard companies.

Moreover, the boundaries of these Standard territories are arbitrary. Almost without exception they conform to state lines. And of course it is clear that state lines, being political boundaries, do not represent the most economical boundaries from the standpoint of distribution. Thus, the Standard Oil Company of Ohio, with a refinery in the northern part of the state, supplies the southern part of Ohio, in spite of the fact that the Standard of New Jersey has a refinery at Parkersburg, West Virginia, just across the southern border of Ohio. Division of territory by state lines, obviously an uneconomical arrangement, would appear to have been adopted for the reason that such a division offers no opportunity for encroachment, and thus avoids disputes.

Further evidence of the absence of competition between the eleven

¹ A map opposite page 22 shows the details.

Standard marketing companies is given by the marked inequalities in the price of gasoline in one territory as compared with another. The report gives numerous illustrations of these inequalities, but it suffices to say that they cannot be explained away on the ground of differences in the cost of refining or of distribution. Were competition effective these inequalities clearly would not persist. The Standard companies in low price territories would make sales in the high price territories, and this would tend to eliminate all differences in price except such as were the result of differences in cost. It is true that some Standard marketing concerns do make shipments into the territory of other Standard concerns; these inter-territory shipments amounted in 1915 to over 200,000,000 gallons. But these shipments represent sales to the company whose territory is "invaded," and the latter is therefore free to dispose of the gasoline as its own product and at such prices as it sees fit. Obviously such sales have no tendency to equalize prices; they permit each company to maintain that monopoly price which yields it the maximum net profit. This they are enabled to do by virtue of the dominant position which they occupy in the trade. The commission estimated that the Standard companies controlled approximately 65 per cent of the gasoline business throughout the United States.² The "independents" would thus control about 35 per cent; yet by no means all of this may be regarded as competitive, since it includes the sales of companies, such as the Tidewater Oil Company, in which Standard stockholders have large interests. Moreover, the facts seem to show that though the "independents" compete for business, they follow the *prices* fixed by the Standard companies, charging a high price in those territories where the price is "fixed" high, and a low price where it is "fixed" lower.

The explanation of the lack of competition between the Standard marketing companies, the report brings out, is the existence of a community of interest among these companies based on common stock holding. This community of interest, it should be noted, includes the oil-producing, the pipe-line and the refining companies, as well as the marketing companies. The stockholder lists of the Standard companies as of January, 1915, make it clear that although some changes in the personnel of the stockholders have come about since the dissolution, a majority of the stock of most of the companies continued to be held by the same small group. For example, 55 per cent of the stock of the Atlantic Refining Company was held by the comparatively small group owning 300 shares or more; and this same

² The approximate percentages by territories are given on page 144.

group held over 50 per cent of the stock of the Prairie Oil and Gas Company, the Prairie Pipe Line Company, the Continental Oil Company, and the Standard Oil Companies of New Jersey, New York, Ohio, Indiana, Kentucky, and Nebraska. (If the holdings under 800 shares were included, the percentage of common holding would amount to approximately 70 per cent.) Moreover, the Standard Oil Company of New Jersey owned practically all of the stock of the Standard of Louisiana and of the Carter Oil Company; and the presidents of the Standard of New Jersey and of New York owned about 70 per cent of the stock of the Magnolia Petroleum Company. A community of interest among the eleven Standard marketing companies and with crude oil and pipe line properties is thus established.

In addition, the leading officers and directors of the Standard companies are frequently stockholders in several other Standard concerns. To cite one instance, the president of the Standard of New Jersey owned 6,000 shares (worth \$3,258,000 at the end of 1915) in his own company, 4,575 shares (worth \$1,029,375) in the Standard of New York, 1,858 shares (worth \$1,012,610) in the Standard of Indiana, 1,100 shares (worth \$480,150) in the Prairie Oil and Gas Company, and 300 shares (worth \$207,000) in the Atlantic Refining Company. Such common stock holdings naturally tend to restrain competition between the separate companies.

The conclusion of the commission was that the combination which was supposed to have been disintegrated remained a combination in fact, if not in law—a combination based on a community of interest, which in turn was the result of the interownership of stock. In making this statement, however, the commission was careful to say that it did not charge the Standard companies with violating the decree, for common ownership was not prohibited by the dissolution decree. Neither did it intend to criticise the decree itself. The Standard Oil Company being the first important trust to be dissolved, the decree might be regarded as an experiment. But it was the deliberate judgment of the commission that the experiment of dissolving corporations without separating owners had not achieved the desired purpose, which was to restore effective competition. In reply to the argument that at some time in the future a redistribution of territory might be brought about by the “operation of economic laws,” the commission said that there was not sufficient evidence of a tendency to a substantial rearrangement of territory to warrant a reliance upon time and the laws of trade. In reply to the argument that the duplication of plant

facilities made necessary by competition was socially undesirable, the commission declared that the cost of such duplication was the price of competition, and in this industry, in its judgment, competition was worth the price.

In view of the striking facts brought out as the result of its investigation, the commission, in accordance with the duty imposed upon it by section 6 (f) of the Trade Commission act, recommended that Congress enact legislation to remedy the unfortunate state of affairs thus disclosed. Its suggestions, so far as they related to common ownership, were: (1) A law providing for the reopening of antitrust cases on the application of the Attorney General by a bill of review for the purpose of securing such modifications of decrees as new conditions might require. (2) The abolition by legislation of common stock ownership in corporations which have been members of a combination dissolved under the Sherman law, where these companies are engaged in the same line of commerce; or, in other words, to enact into law the doctrine laid down by the courts in the *Union Pacific* and *Reading* cases. (3) As an alternative to the above, an effective limitation upon common ownership of stock in potentially competitive corporations by withdrawing the power of voting and control.³ (4) If Congress deemed it inadvisable to prevent common ownership, with its almost inevitable restriction of competition, the commission recommended the enactment of legislation which would fix upon the common owners of stock in potentially competing concerns the responsibility for such acts of these concerns as resulted in the prevention of competition. With respect to the pipe lines, the commission urged that the best policy would be to apply the principle of the commodity clause, and segregate the ownership of the pipe lines from the other branches of the petroleum industry.

These recommendations of the commission are timely. The oil trust has been chased from a "legal" into a "liquidating trust"; thence into the holding company organization; and as the result of the government suit of 1906 into a community of interest arrangement based on common ownership of stock. The commission in recommending that we complete the chase demonstrates that it is a progressive and courageous body, willing to advocate far-reaching remedies, when such

³ It is interesting to note that President Wilson in his message of January 20, 1914, merely suggested that the owners of stock in companies which ought to be independent, but which on account of common stock ownership were not, might be required to decide in which of them they would elect the right to vote.

are seen to be necessary to restore competitive conditions, and thus give effect to the public policy to which the country is committed.

ELIOT JONES.

Leland Stanford Junior University.

REPORT OF THE ROYAL COMMISSION TO INQUIRE INTO RAILWAYS AND TRANSPORTATION IN CANADA. In July, 1916, a royal commission was appointed by the Canadian government, consisting of Mr. A. H. Smith, of the New York Central, Sir George Paish, and Sir Henry Drayton, of the Dominion Board of Railway Commissioners, to make a complete survey of the railway situation in Canada. It being found that Sir George Paish was unable to act owing to illness, Mr. W. M. Acworth was appointed in his stead. The commissioners met under the chairmanship of Mr. Smith, and proceeded to perfect their organization for what, it must be conceded, was a gigantic task. Professor Swain, of Harvard University and the Massachusetts Institute of Technology, was retained to make a detailed examination, with the help of a corps of engineers, of the physical properties of the various railroads concerned, and notably of the Canadian Northern and the Grand Trunk Pacific. Mr. A. H. Smith and Sir Henry Drayton spent some weeks inspecting the railroads of the country, for that purpose travelling upwards of 10,000 miles and visiting all important points from Halifax to Vancouver and Prince Rupert. They conferred with many representative citizens at important centers along the railway lines; and received voluminous reports and statistics from the railway companies concerned. Formal hearings were held in Toronto and Montreal at the offices of the Canadian Northern and the Grand Trunk Pacific. They studied the situation as they found it in the autumn and winter of 1916-1917; and report that they are in substantial agreement as to the necessity for offering constructive aid in bringing the railways through the present crisis. They differ, however, as to the extent and method of government help desirable, and as to the increase and character of government liability and interest now and for the future. The report presented (*Report of the Royal Commission to Inquire into Railways and Transportation in Canada*, Ottawa, 1917, pp. cv, 86, 15c.) therefore includes two reports—a majority report signed by Mr. Acworth and Sir Henry Drayton, and a minority report by Mr. A. H. Smith. As these differ radically in their findings, it will be necessary, first of all, to outline the Canadian railway situation as they found it.

In the first place, the investigation was made imperative owing to the financial disabilities under which the Canadian Northern and the

Grand Trunk Pacific found themselves operating in 1914. It will be recalled that the Grand Trunk Pacific was promoted and constructed by the Grand Trunk Railway System, the pioneer railway of Canada. Under its agreement with the Dominion government, the latter was to build that part of the projected transcontinental system stretching between Winnipeg, Manitoba, and Moncton, New Brunswick, on the Atlantic seaboard. This part of the line, while built at government expense, was to be leased to and operated by the Grand Trunk Pacific for a period of years, the first seven-year period to be free of interest, and thereafter 5 per cent to be paid on the capital cost. The Grand Trunk Pacific, on the other hand, was to build and operate that part of the line running between Winnipeg and Prince Rupert, on the Pacific coast. It will be observed that, by this arrangement, the government was to build by far the costliest part of the completed system, the lines from Winnipeg westward being constructed largely on the prairies. Owing to the fact that the estimated cost of the government's portion of the road, \$67,000,000, was greatly exceeded, finally amounting to \$200,000,000, the Grand Trunk Pacific found itself faced with a very serious situation in 1914, at the outbreak of war. It was, in fact, not earning the cost of operation on its own section of the Transcontinental; and it did not seem possible, in the circumstances that arose, to earn operating costs on the line between Winnipeg and Moncton, not to mention the 5 per cent rental that it would be compelled to pay on the government-built portion costing \$200,000,000. It was compelled to draw upon the Dominion Treasury for financial assistance, and finally to repudiate its agreement with the government altogether.

The Canadian Northern also found itself hard hit by the outbreak of war, and the crisis that had arisen in Canada's internal trade. Starting in a small way in Manitoba, this line expanded into a profitable Granger system in the three prairie provinces of Manitoba, Saskatchewan, and Alberta. Under the daring, and, it must be admitted, clever direction of Sir Donald MacKenzie and Sir William Mann, the Canadian Northern was carried all the way across the continent from Vancouver, on the Pacific, to tide-water at Quebec. Unfortunately it, too, was nearing completion when war was declared in August, 1914. It will be recalled that the British government immediately forbade the flotation of loans on colonial account, except in case specific approval was given. Messrs. MacKenzie and Mann found themselves unable to secure the needed capital to equip their lines and to provide adequate rolling stock, in London; and their securities were, for the time being, unsalable in New York. With a depleted income account, the Canadian

Northern found it impossible to cover operating expenses, and the Dominion government was obliged to come to its support. In view of the fact that it did not seem possible for the Grand Trunk Pacific or the Canadian Northern to make financial headway in the immediate future, without continued government support, the government decided to appoint a commission to thoroughly examine the situation and suggest the best methods of grappling with it. Hence the report under consideration.

The commissioners were directed, to examine specifically, and to report upon, the following points:

1. The general problem of transportation in Canada.

2. The status of each of the three transcontinental railway systems with special reference to:

a. The territories covered by each system and the service which it is capable of performing in the general scheme of transportation;

b. Physical conditions, equipment and capacity for handling business;

c. Methods of operation;

d. Branch lines, feeders and connections in Canada;

e. Connections in the United States;

f. Steamship connections on both oceans;

g. Capitalization, fixed charges and net earnings, having regard to (1) present conditions, and (2) probable future development with increase of population.

3. The reorganization of any of the said railway systems, or the acquisition thereof by the state; and, in the latter case, the most effective system of operation, whether in connection with the Intercolonial Railway or otherwise.

The commissioners have reported exhaustively on all these points, and have presented a document of enduring value to all economists, but especially to the people of Canada. It will not be possible, however, in this brief survey, to do more than touch upon the main findings. In the first place they draw attention to the fact that Canada has a railway mileage, in round figures, of 40,000 miles—a very great amount in comparison with its present population of 7,500,000. This mileage far surpasses that of the United Kingdom and of France, with populations of 46,000,000 and 40,000,000 respectively. It is equal to that of the German Empire with its population of 67,000,000 and of India with 300,000,000. The Canadian mileage is more striking when compared with that of Australia—18,390 for a population of 5,000,000; or with Argentina,—20,290 for 5,000,000. Canada has one sixth the

railway mileage of the United States, although its population is only one fourteenth that of the republic. To put these facts in another way: Canada has 185 persons for each mile of railway; the United States 400 for each mile, Australia 274, Argentina 238, the United Kingdom 2,000 and Russia 4,000. And what is of equal importance, the Dominion has a magnificent system of inland waterways which will always carry a large part of the country's traffic. If area be considered, Canada will be found, of course, far down the list, but areas represent potentialities rather than actualities. These facts are fundamental and must be kept in mind in studying the Canadian railroad problem. The truth is that, in proportion to traffic and population, Canada has largely discounted its railroad future.

The test of successful railway operation is found in the return on invested capital. Taking into account taxes, rents, and similar items which relate to operation, the relation of net operating income to cost of equipment and road for the Canadian railways, comes out as follows:

ROAD	Net operating revenue	Net rents, hire of equipment, taxes, etc.	Total	Per cent on property investment
Canadian Pacific . . .	\$46,416,748	\$2,109,477 Dr.	\$41,307,266	(<i>Per cent</i>) 8.34
Canadian Northern . . .	10,232,088	1,241,465 Dr.	8,990,623	2.28
Grand Trunk	10,378,027	469,926 Dr.	9,908,101	2.33
Grand Trunk Pacific (ex- cluding branch lines)	1,060,346	1,153,283 Cr.	2,213,629	1.15
Transcontinental . . .	429,455	1,371,070 Dr.	948,615 Dr.	Deficit
Intercolonial	2,363,478	167,214	2,196,264	1.88

With the exception of the Canadian Pacific, it is seen from the above table that the return is so low on the investment of property in Canadian railroads that the country has built a greater mileage than can be justified on commercial grounds.

The Canadian people are seriously concerned over the present railway situation, not only because the credit of the country is in peril, but also because very large public grants in the form of cash, or lands, or guarantees of securities, or all combined, have been made to the eight main railroads in the country—the Canadian Pacific, the Canadian Northern, the Grand Trunk Railway, the Grand Trunk Pacific, the Grand Trunk Pacific Branch Lines, the National Transcontinental, the Intercolonial, and the Prince Edward Island. Not counting the loss of interest for many years upon the investment in roads operated by the government,

the commissioners find that the people of Canada have provided, or guaranteed the payment of, sums totalling \$968,451,737. This works out at over \$30,000 per mile of road. But even this is not all. In addition they have granted great areas of land as yet unsold and unpledged. They have undertaken the construction of other lines whose cost will be an important addition to this large outlay. Further, in the case of some of the companies to which they have given or lent large sums of money to meet pressing needs, they have voluntarily accepted security ranking after the bulk of private capital already put into the undertaking.

The majority report recommends that a new public authority, a board of trustees, be incorporated by act of Parliament, as "The Dominion Railway Company;" and that this board take over the Canadian Northern, the Grand Trunk, and the Grand Trunk Pacific. The Canadian Pacific is to be left under its present management. The commissioners who signed the majority report further recommend that the government assume responsibility to The Dominion Railway Company for the interest on the existing securities of the transferred companies. In the scheme as outlined, the Intercolonial and the National Transcontinental will also be transferred to the new company. The commissioners recommend that the whole of the Dominion's railways be operated by the trustees as one united system, on a commercial basis, under their own politically undisturbed management, on account of, and for the benefit of, the people of Canada. They suggest that there shall be five trustees—three railway members, one member selected on the ground of business and financial experience, and one as specially possessing the confidence of railway employees; that the original trustees be named in the act constituting the board; and that their tenure of office be substantially the same as that of judges of the supreme court. It will be seen, therefore, that the commissioners reject absolutely, in the majority report, government ownership of the Canadian railroads.

On the other hand, Mr. A. H. Smith comes to quite contrary conclusions. He rejects the above scheme as being, in essence, but only in a disguised form, a species of government ownership. In brief, his findings are as follows: He would leave the Canadian Pacific alone, and would have the Grand Trunk operate the eastern line now held by that company, and also the eastern line of the Canadian Northern. On the other hand, he would let the Canadian Northern operate the western lines now held by that company, as well as those of the Grand Trunk System, and have the government operate the connections, or procure

their operation by private companies. He is of the opinion that all this can be done under an arrangement that will be just and equitable to all concerned; and expresses the opinion that the day is not distant when the country will have survived the war and resumed its prosperous growth.

It is difficult to say at present which of these recommendations will be accepted by the government. It would appear, however, that no action will be taken in the way of government ownership of the railways till after the war, owing to financial and other difficulties.

At the same time it is imperative, according to both reports, that the government give further financial assistance to both the Grand Trunk and the Canadian Pacific in order that adequate equipment may be provided for traffic purposes during the course of the war.

W. W. SWANSON.

The University of Saskatchewan.

THE REPORT ON THE CITIZENS WATER SUPPLY OF NEWTOWN (pp. 378, Oct., 1916) made to the Commissioner of Water Supply, Gas, and Electricity of New York by Delos F. Wilcox is a careful examination of the causes of friction in the relations between the city of New York and residents therein, and one of the water supply companies of the city. As a description of the complicated and involved situations which frequently arise in American cities resulting from old disputes, obscure transactions, lack of foresight, and changing municipal policies, it is highly valuable and illuminating. Aside from its discussion of purely local problems, such as the schedule of rates and practices recommended, and the consideration of the desirability and methods of municipal purchase, its greatest value is in its general reasoning regarding valuation and rate making. Here the author makes a positive contribution to the literature of public utility regulation.

In the discussion of rates for fire protection the report states that hydrant rentals in New York, as elsewhere, have been based largely upon guess work and bargaining. Dr. Wilcox seeks a more accurate and scientific basis for hydrant rentals. He is unwilling to accept the theory of the Wisconsin commission, under which fire protection and service to private consumers are regarded as coördinate, each being required to bear its proportionate share of expenses, upon the ground that it would place too heavy a burden upon the city. He holds that the company established its plant primarily to serve private consumers, that fire protection is an incidental service imposed upon it by law.

Therefore, he maintains that it is necessary to estimate the cost of a substitute plant, adequate to serve all the private consumers, and having determined the value of the present plant which serves both the city and private consumers, to deduct from this the cost of the substitute plant. The difference represents the investment attributable to fire protection.

Obviously, this theory makes the cost of fire protection to the city less, and the cost of private service more, than would be the case under the Wisconsin theory. For example, under this "excess-investment" rule, Dr. Wilcox finds that 100 per cent of the water supply system and works, 100 per cent of the buildings and mechanical equipment, and 70 per cent of the distributing system are attributable to private users, whereas the Wisconsin commission, under its theory, has found that 40 to 60 per cent of the fixed charges upon investment in water plants, is chargeable to fire protection alone. It would seem to be a fair question, whether fire protection has not come to be of coördinate importance with serving private consumers, regardless of what a company's purposes may have been when it was originally organized.

The appraisal of the physical property was conducted upon a basis of reproducing the identical plant, but under the physical conditions which prevailed at the time it was constructed. This principle avoids many of the absurd claims which have sometimes been advanced under cover of "cost of reproduction," as, for example, claims for value on account of pavements laid by a municipality, subsequent to the laying of mains.

In discussing lands acquired in advance of present needs, the report states:

If . . . a water company has purchased water-bearing lands several years in advance of their necessary use . . . it is now clearly established that the burden of carrying the lands from the time of their purchase up to the time when their use for public service is reasonably necessary cannot be imposed upon the water consumers, but must be borne by the stockholders of the company.

The reasoning is, that when the lands do actually come into use the company will be permitted to earn a fair return upon their then value. If this value proves to be more than the purchase price plus carrying charges, the company profits by the exercise of its good business judgment. If it proves to be less, the company loses by the mistake in its business judgment. The issue here would seem to turn largely upon the basis of valuation which is to be used. If original cost is to be

used, it would frequently prove advantageous to the public if the utilities would buy land in advance of present needs, even though such land be included in the valuation, before it is actually used. On the other hand, if present value is to be the controlling factor, as it generally is, such a course would frequently prove disadvantageous to the public.

The question of land is further considered under "going value." The issue here was the appreciation in land values, which had largely increased the company's surplus, and which might be regarded as a partial offset to accrued depreciation. Dr. Wilcox states:

. . . If in the course of the development of its business it (a utility company) finds occasion . . . to sell off land at a profit, the entire proceeds should be reinvested in the property, or else the capital account should be diminished to the extent of the withdrawal of funds. The stockholders of a public service corporation are not entitled to sequester the profits from land transactions, and at the same time to compel the consumer to make good all losses through wear and tear and obsolescence of depreciable structures.

This principle appears perfectly sound, but it is one which has ordinarily been overlooked.

In considering the rate of return to be allowed, attention is called to the fact, that the company enjoys neither a complete monopoly of present service nor assurance against future competition. The author admits that, theoretically, the existing and prospective perils of competition might justify a high rate of return. But, he states:

In this particular case the fixing of higher rates, because of such perils, might increase those very perils. The medicine, instead of curing the disease, would aggravate it. The one thing most potent in stimulating competition is high rates, and if the rates were increased to recompense the company for this danger, the likelihood of potential competition becoming actual would only be strengthened.

Obviously, this theory, like many others in the field of public utility control, might be carried so far as to render it absurd. It might be construed to mean that the greater a company's insecurity the lower should be the rate of return, in order to produce greater security. But, of course, this is not Dr. Wilcox's meaning, as is evidenced by the fact that he allows 7 per cent as a reasonable rate of return. The principle here advanced is important, because it calls attention to the fact that a utility is not to be permitted an unduly high rate simply because it has no definite assurance against the possibility of future competition.

RALPH E. HEILMAN.

Northwestern University.

Additional material relating to the federal valuation of railways in the United States published by the Presidents Conference Committee (937 Commercial Trust Bldg., Philadelphia) is as follows:

Statement Prepared by H. C. Phillips, General Secretary, of the Developments in Connection with Federal Valuation, as of February 10th, 1917 (pp. 15).

Circular Communication to the Chairmen of Valuation Committees, in Reference to the Supplement to Interstate Commerce Commission Valuation Order No. 7—Schedules of Land (Apr. 10, 1917, pp. 6).

Statement Prepared by H. C. Phillips, General Secretary, of the Developments in Connection with Federal Valuation, as of April 20th, 1917 (pp. 18).

Statement of Developments in Connection with Federal Valuation as of July 2nd, 1917 (pp. 11).

Tentative Valuation by Interstate Commerce Commission, February 14, 1917, Elgin, Joliet & Eastern Railway with its Leased Lines (pp. 17).

There have also been published from the office of the Presidents' Conference Committee hearings *Before the Interstate Commerce Commission* on the valuation of the Atlanta, Birmingham & Atlantic Railroad Company; Georgia Terminal Company and Alabama Terminal Company; and the Texas Midland Railroad Company (Feb. 3, 1917, pp. 320); also *Hearings* held March 19-31, 1917, before the commission, in regard to these same roads and additional lines (pp. 935).

Three pamphlets by James B. Nelson, member of the Valuation Committee of the Chesapeake and Ohio Railway Company, have been received, which bear the following titles: *Federal Valuation of Common Carriers under Act of March 1, 1913* (pp. 36); *Some Comments on Federal Valuation of Common Carriers*, an address delivered before the Richmond Railroad Club, February 12, 1917 (pp. 27); *The Chesapeake and Ohio Railway* (pp. 21).

The Guaranty Trust Company of New York has published a pamphlet on *The Railroad Situation* (1917, pp. 26). The National City Company has also issued a pamphlet under the same title, prepared by Pierpont V. Davis, manager of the railroad department of the National City Company (pp. 13).

The United States Department of Agriculture has recently issued Bulletin No. 387 on *Public Road Mileage and Revenues in the South-*

ern States, 1914 (Washington, 1917, pp. 52, lxxi). This shows the mileage of improved and unimproved roads, sources and amounts of road revenues, bonds issued and outstanding, and a description of the systems of road administration, fiscal management, and other factors affecting road improvement in each state.

The Philadelphia Bourse has made a report on an investigation which has been under way for more than a year and is summarized under the title *The "Philadelphia Plan" for Unified Regulation of Railroads* (Philadelphia, May 1, 1917, pp. 40). This report urges the federal incorporation of companies engaged in interstate commerce; exclusive power of regulation by the Interstate Commerce Commission; the reorganization of this commission into regional commissions subordinate to an appellate body; a more precise definition of the powers of the commission; and a transfer of the powers of investigation and prosecution from the commission to some other agency of the government.

A brief has been received, prepared on behalf of the state of New York, the Chamber of Commerce of the state of New York, and the Merchants' Association, presented to the Interstate Commerce Commission, *Docket No. 8994, The Committee on Ways and Means to Prosecute the Case of Alleged Railroad Rate and Service Discrimination at the Port of New York, et. al., vs. The Baltimore & Ohio Railroad Company, et. al.* (pp. 165). The brief is prepared by Julius Henry Cohen, counsel, and contains a considerable amount of historical material in regard to the early commercial development of New York and New Jersey.

A reprint has been made of a statement of L. F. Loree, president of the Delaware and Hudson Company, before the Interstate Commerce Commission, May 7, 1917, in relation to an *Advance in Freight Rates* (pp. 8).

The Department of City Transit, of Philadelphia, has published an exhaustive report upon *Proposal of the Philadelphia Rapid Transit Company for the Equipment and Operation of City-Built High-Speed Lines* (p. 148). This was submitted to the Common Councils of Philadelphia, March 29, 1917. The contract which was proposed by the Philadelphia Rapid Transit Company is analyzed from four points of view: public policy, necessity, and convenience; legal; construction and engineering; and financing or feasibility. There are a large number of diagrams illustrating the analyses.

Among recent public utility reports to be noted are:

Thirty-second Annual Report of the Railroad and Warehouse Commission of Minnesota for 1916 (Minneapolis, pp. 388).

Second and Third Annual Reports of the Public Utilities Commission of Colorado, 1915-1916 (Denver, pp. 175).

Thirty-second Annual Report of the Board of Gas and Electric Light Commissioners of Massachusetts (Boston, 1917, pp. 267; 533).

Second Annual Report of the Public Utilities Commission of Maine, 1916 (Augusta, pp. 590).

Annual Report of the Public Utilities Commission of Ohio, 1915 (Columbus, 1916, pp. 466).

The Board of Gas and Electric Light Commissioners of Massachusetts has published in pamphlet form a compilation of *New Legislation of Especial Interest to Gas, Electric and Water Companies and Municipalities Owning Lighting Plants* enacted in 1917 (Boston, pp. 32).

The city of Chicago and the Peoples Gas Light & Coke Co. of that city have accepted an ordinance governing the rates and standards of service, prepared by Edward W. Bemis, consulting engineer, and Donald R. Richberg, attorney, representing the city of Chicago. This ordinance introduces some important new features. It permits a gradual reduction in candle power until in 1919 only a heat unit standard will be required. It requires a reduction in price from 80 cents to an average of 72½ cents per M feet and a large share in profits with the city beyond a certain amount. It requires liberal furnishing and maintenance of mantles to the consumer by the city; opens all the books and property of the company to examination by the city's experts at any time; and at any time after one year permits of such readjustment of rates or heat standards as the valuation of the property now under way and experience during the next year or two may render advisable. Meantime, the company also contracts to put in a large coke oven plant which will render possible a material reduction in price within three years and also will relieve the market of a large demand for gas oil, thus having a tendency to lessen the rise in the price of oil.

Labor

THE OREGON MINIMUM WAGE CASES. The Supreme Court of the United States rendered a decision on April 9, 1917, which upholds the Oregon minimum wage law. This decision establishes the right of a state to enact a minimum wage law as a health measure. The two cases that were before the court, were first argued in December, 1914.

The brief submitted at that time was prepared by Mr. Louis D. Brandeis, later appointed an associate justice, and Miss Josephine Goldmark. The cases were reargued in October, 1916, by Mr. Felix Frankfurter, the original brief being amplified and brought down to date.

In form this brief (*Oregon Minimum Wage Cases*. Supreme Court of the United States, October term, 1916, nos. 25 and 26, Washington, Superintendent of Documents, 1917, pp. vi, 783) is similar to the well-known briefs that were prepared by Mr. Brandeis and Miss Goldmark and submitted in the shorter hours cases. In the present instance, the statement of the case and the argument occupy 54 pages. Then follows Part First, which consists of 76 pages devoted to the legislation on the subject, including the important sections of the laws in Victoria and Great Britain. The American legislation is given in full. Finally, Part Second, 687 pages, consists of a well-selected and well-organized collection of information which aims to set forth the experience upon which minimum wage legislation is based. This information is drawn from a wide variety of sources. Cuttings from government documents, and public and private investigations, statements of eminent economists, sociologists, publicists, social workers, and statesmen have been marshalled to show the evils resulting from low wages and the benefits that flow from adequate wages. A classified index of the source materials quoted concludes the brief.

The information compiled in the second part of the brief is in itself a valuable piece of work. It is not only well adapted to its immediate purpose but, because of the wide variety of sources from which the information has been drawn, it will be found useful in aiding subsequent study of this important social and economic question. As a method of presenting the latest information bearing on the legal phases of the subject, the brief will impress the layman as a model. It brings to the court matters of common knowledge, and in this respect departs from that form of brief which depends solely upon precedent for support for the argument on the case at bar. In this way current social philosophy can be impressed upon the court more effectively than when the attention of the judges is centered on the argument in previous cases. In a dynamic society, and especially in our own country where change in the fundamental law is difficult—depending largely on constitutional interpretation, it is highly important that current thought receive due consideration. Constitutional forms and theories will in this way be more speedily adapted to the needs of the present. This form of brief accomplishes this

end in an admirable way, and judged by the standard of results secured it has demonstrated its effectiveness. However, it might be argued that, independent of the brief, members of the Supreme Court have come under the influence and have accepted the essential justice of the social philosophy upon which legislation of this character rests. And yet an examination of this and similar briefs will convince the most skeptical that the briefs themselves have certainly contributed to this result.

Persons interested in other forms of social legislation, as, for instance, the efforts of organized labor to limit the use of the injunction in labor disputes, might well take their cue from the experience of the National Consumers' League with the movement for shorter hours and minimum wage laws for women, and organize their campaigns along similar lines. There can be little doubt that the intelligence put into these two movements is bearing fruit and the acceptance by the Supreme Court of the legal principles advanced is rapidly adjusting our constitutional theories to modern social and economic problems.

The argument of the brief is likewise of interest. There were two cases before the court, *Stetler v. O'Hara*, and *Simpson v. O'Hara*, on appeal from a decision of the supreme court of the state of Oregon. Stetler was a paper box manufacturer in Portland, and Simpson was an adult woman in his employ at a wage less than had been determined by the Industrial Welfare Commission in accordance with the minimum wage law of 1913. The plaintiffs made three attacks upon the act. They held that "Oregon was prohibited from enacting this legislation by the equal protection clause; the privileges and immunities clause; the due process clause." The first and second of these attacks were dismissed in this brief either because the phase of the question was adequately treated in the brief submitted to the supreme court of the state of Oregon, or was covered in the subsequent treatment of the due process clause. The real contentions reduced themselves, it was held, to a claim that the plaintiffs had been deprived of liberty or property without due process of law. The outline of the argument is as follows: (1) Oregon by this legislation aimed at "ends" that are "legitimate" and "within the scope of the constitution"; (2) The "means" selected by Oregon are "appropriate and plainly adapted" to accomplish these ends; (3) No right of the plaintiffs secured under the constitution of the United States "prohibits" the use of these appropriate means so adopted by the state of Oregon to accomplish these legitimate public ends.

The purpose of the act was to protect women and minors against the pernicious effects of low wages, of wages less than sufficient "to keep labor going." While the state of Oregon might have tried other means for accomplishing this end than the one chosen, the brief holds that the state should be permitted to experiment with this method "unless it was affirmatively prohibited by the constitution." The brief concludes that the "end" is "legitimate" and the "means" are "appropriate and plainly adapted" to that end.

The remaining question was, Did the act deprive Stetler and Simpson of life, liberty, or property without due process? The essential point here involves what constitutes "due process," and the brief points to a long line of decisions in which the dominant ideas are (1) freedom from arbitrary and wanton interference and (2) protection against spoliation of property. The remainder of the brief is devoted to an analysis of the cases under consideration and to testing the act by the above principles of due process.

What liberty of the plaintiffs' was curtailed? According to the brief nothing but the "liberty" of not being required to get leave of the commission before making contracts below a living wage. Stetler complained that he was restricted to the employment of women "who are capable of performing labor sufficient to earn" \$8.64 or more. The "liberty" claimed by Stetler is the "liberty" to employ \$8 women for \$8 instead of \$8.64 women for \$8.64, which the brief holds to be a nominal and theoretical liberty.

The "liberty" which Simpson asserts as curtailed is similarly fictitious and theoretical. Her allegation was that \$8 is the "best wages and compensation for any employment or labor which she is capable of performing." The brief asserts that "here is an 'inspired' case filed not in her own interest, but in support of her employer's." The real question then is, Are these alleged rights "liberties" protected by the constitution?

Concerning the alleged deprivation of property the brief attempts to show that neither Stetler nor Simpson has been dealt with arbitrarily or wantonly, nor has there been any spoliation of their property. This line of reasoning is worked out in detail and supported by numerous decisions previously rendered by the Supreme Court.

There has been no attempt in this brief to argue in favor of the right of a state to enter the field of interfering with wage contracts except as a health and general welfare measure. Incidentally, other benefits are mentioned, such as the benefit to industrial peace, and to

competing employers, etc., but these occupy a much larger place in the second part of the brief than in the argument proper. The idea of the minimum in the argument is the absolute physical minimum. The rate of wage fixed by the commission is referred to as "the minimum cost of her labor." "It provides for only such quantity of food as will preserve her working energy and for shelter and clothing as will save it from the destruction of the elements." "The significance of this is that the expenditure by some one of every penny of this whole sum of \$8.64 upon Simpson goes to the operation of the industry and merely provides for the cost of that operation. It goes to the maintenance of the energy purchased by the employer and devoted to the industry." The significance, then, of the decision in these cases is that the police power has been extended to include the right of a state to interfere with the freedom of contract of adult women in respect to wages as a health measure.

F. S. DEIBLER.

Northwestern University.

LABOR LAWS IN THE PACIFIC STATES. A very readable and thorough survey of the administration of labor laws in Washington, Oregon, and California is given by Hugh S. Hanna in *Labor Laws and Their Administration in the Pacific States*, which is Bulletin No. 211 of the United States Bureau of Labor Statistics and No. 9 in the Labor Laws of the United States Series (Washington, Superintendent of Documents, 1917, pp. 150). The author discusses carefully and fully the legislation then on the statute books (1915) affecting wage payments, unemployment, child and woman labor, compensation, mediation, safety, hours of work, and health regulations. Almost one half of the report is devoted to the subject of compensation for industrial accidents. An introductory statement describing labor and industrial conditions affords a background for the succeeding chapters. It stresses the prevailing seasonal industries which make for unemployment, the floating laborer, the lack of satisfactory provisions for the safety and health of the casual, and the employment of large numbers of women and children in such industries as crop-picking and canning.

After having read the monograph, one lays it down with the feeling that the author has drawn his data almost solely from the official reports of the commissions and boards of the states concerned and that he knows nothing whatsoever of the work of those boards from having had contact with them. One is also disappointed in not finding any story of the various struggles waged by labor unionists and those with

a social point of view in securing the legislation referred to. Another disappointing feature of the report is the total absence of either favorable or unfavorable criticism of the laws or their administration.

The report is what a strict interpretation of its title would suggest, a statement of labor laws and their administration; and as such it is a very satisfactory piece of work.

IRA B. CROSS.

University of California.

Recent issues of the federal Bureau of Labor Statistics are:

No. 219, *Industrial Poisons Used or Produced in the Manufacture of Explosives*, by Dr. Alice Hamilton (Washington, 1917, pp. 41). This study is based upon an investigation extending through the larger part of the year 1916 in 41 factories located in New England, New York, New Jersey, Pennsylvania, Delaware, Maryland, Virginia, and Indiana, employing about 90,000 workers. Of these, about one third are exposed to poisons. All were adult males. It was impossible to obtain accurate figures as to the amount of sickness and death caused by work in this industry since the war broke out, but in 28 plants in one year there were between two and three thousand cases of industrial poisoning reported. The experience with poisons is considered in detail.

No. 223, *Employment of Women and Juveniles in Great Britain during the War*, which is a reprint of memoranda of the British Health of Munition Workers Committee (April, 1917, pp. 121).

Some recent reports dealing with labor are as follows:

Report of the Department of Factory Inspection of Connecticut for the Two Years Ending September 30, 1916 (pp. 99).

Twenty-Seventh Report of the Bureau of Labor Statistics of Connecticut for the Two Years Ended November 30, 1916 (pp. 96).

Proceedings of the First Annual Convention of the Louisiana State Federation of Labor, April 2-3, 1917 (pp. 86).

Fifteenth Biennial Report of the Department of Labor and Industries of the State of Minnesota, 1915-1916 (pp. 195).

The Labor Laws of the State of Nevada (1917, pp. 51).

Inspection of Workshops, Factories and Public Buildings in Ohio, 1915, Bulletin of the Industrial Commission of Ohio, vol. III, no. 7 (Columbus, June, 1916, pp. 163).

Work of the Free Labor Exchanges of Ohio for the Year Ending

June 30, 1916, Bulletin of the Industrial Commission of Ohio, vol. III, no. 8 (Columbus, June, 1916, pp. 60).

Union Scale of Wages and Hours of Labor in Ohio on May 15, 1916, Bulletin of the Industrial Commission of Ohio, vol. IV, no. 4 (Columbus, March, 1917, pp. 72).

Twenty-third Annual Report of the Public Employment Office of the City of Seattle, Washington, 1916 (pp. 16).

Report of Survey Committee to the Dallas Wage Commission. (Dallas, Texas, pp. 16).

Money, Prices, Credit, and Banking

The Federal Farm Loan Bureau of the Treasury Department has issued Circular No. 7, *Killing off Mortgages. A Description of the Methods of Amortization and their Benefits to Borrowers* (Washington, June, 1917, pp. 16).

The Irving National Bank (Woolworth Bldg., New York) has published a pamphlet on the *Federal Reserve Act* (pp. 30) containing regulations, analyses, and indexes. This includes the amendments approved June 21, 1917, and the regulations issued by the Federal Reserve Board.

The Guaranty Trust Company of New York has also made a *Digest of the Federal Reserve Act* including amendments to June 21, 1917 (pp. 47).

The Post Office Department has issued a new edition of *Title Nine of the Postal Laws and Regulations Relating to the Postal Savings System as Amended* (Washington, July 1, 1917, pp. 71).

An address by Professor Ray B. Westerfield, of Yale University, on *Trade Acceptances*, delivered before the New Haven Association of Credit Men on April 19, 1917, has been published as a reprint.

Recent compilations of state banking laws have been made as follows: *Banking Laws of the State of Maine, 1917* (Augusta, Banking Dept., pp. 89).

A Compilation of the Laws of Minnesota Relating to State Banks, Compiled in 1915 (Minneapolis, Supt. of Banks, pp. 49).

Banking and Trust Company Laws of the State of Washington (Olympia, State Bank Examiner, 1917, pp. 163).

Laws in Relation to State Banks and Banking, Colorado, 1917 (Denver, pp. 24).

Annual state banking reports have been received as follows:

Indiana Bank Department, September 30, 1916 (Indianapolis, Auditor of State, pp. 298).

Annual Report of the State Bank Commissioner of Colorado, 1916 (Denver, pp. 213).

Report of the Commissioner of Banking, Michigan, December 31, 1916 (Lansing, pp. clii, 635). This includes the opinions of the attorney general relating to banking subjects.

Report of the State Banking Board of Nebraska, 1916 (Lincoln, pp. xxx, 421).

Ninth Annual Report of the Bank Commissioner of Rhode Island, 1916 (Providence, pp. xii, 309).

Annual Report of the Superintendent of Banks of New York relative to Savings Banks, Trust Companies, Investment Companies, Safe Deposit Companies, Personal Loan Companies and Personal Loan Brokers, 1916 (Albany, pp. 689).

Twelfth Annual Report of the State Banking Department of the State of Idaho, 1916 (Boise, pp. 143).

The following reports of state bankers' associations have been received: *Proceedings of the Twenty-fourth Annual Convention of the Alabama Bankers' Association, 1916* (McLane Tilton, Jr., secretary, First National Bank, Pell City, pp. 160), containing addresses on "Banking conditions in Alabama," by Joseph A. McCord; "Rural credit and colonization in relation to national defense," by Haveland H. Lund; and "The banker and the law," by Milton C. Elliot, including a discussion of the federal reserve system.

Proceedings of the Arizona Bankers' Association, vol. X, thirteenth annual session, Nov. 10-11, 1916 (Morris Goldwater, secretary, Prescott, pp. 134).

Proceedings of the Twenty-sixth Annual Convention of Arkansas Bankers Association, 1916 (Robert E. Wait, secretary, Little Rock, pp. 206), containing an address on "Rural credits," by A. D. Welton; "Warehousing of cotton," by Nathan Adams; and "Reciprocal bank relations, under the reserve act," by J. H. Ardrey.

Proceedings of the Fifteenth Annual Convention of the Colorado Bankers Association, July, 1916 (Paul Hardey, secretary, Interstate Trust Company, Denver, pp. 182).

Proceedings of the Twenty-sixth Annual Convention of the Illinois Bankers Association, October, 1916 (Richard L. Crampton, secretary, 208 South La Salle St., Chicago, pp. 280), containing addresses on

"The federal farm loan bank," by Senator Hollis, New Hampshire; "Accounting, collections, transit," by H. R. Aisthorpe; "Commercial paper purchased of brokers," by F. W. Crane; "Farm mortgage loans," by O. P. Bourland.

Proceedings of the Indiana Bankers Association Twentieth Annual Convention, October, 1916 (Andrew Smith, secretary, Indiana National Bank, Indianapolis, pp. 302), containing an address by William J. Gray on "The federal land bank."

Proceedings of the Twenty-fourth Annual Meeting of the Kentucky Bankers Association, October, 1916 (Arch B. Davis, secretary, Louisville, pp. 170).

Convention Proceedings of the Louisiana Bankers Association, 1916 (Eugene Cazedessus, secretary, Baton Rouge, pp. 144).

Proceedings of the Sixth Convention of the New Mexico Bankers' Association, 1916 (W. A. McMillin, secretary, Albuquerque, pp. 167).

Proceedings of the Twenty-third Annual Convention of the New York State Bankers' Convention, 1916 (William J. Henry, secretary, 11 Pine St., New York City, pp. 189), containing an address on "The federal reserve system and the banks," by Paul M. Warburg.

Proceedings of the Twenty-first Annual Convention of the Maryland Bankers Association, 1916 (Charles Hann, secretary, Merchants-Mechanics' National Bank, Baltimore, pp. 115).

Report of the Proceedings of the Sixteenth Annual Convention of the South Carolina Bankers' Association, July, 1916 (Julian C. Rogers, secretary, Florence, pp. 251). This contains an address on "Country banks and the collection system," by George B. Seay, governor of the Federal Reserve Bank of Richmond.

Report of the Twenty-fifth Annual Convention of the South Dakota Bankers' Association, 1916 (A. B. Darling, secretary, Western National Bank, Mitchell, pp. 144).

Proceedings of the Twenty-third Annual Convention of the Virginia Bankers' Association, 1916 (Walker Scott, secretary, Farmville, pp. 275).

Report of the Summer Convention of the Vermont State Bankers' Association, 1916 (C. S. Webster, secretary, Barton Savings Bank and Trust Company, Barton, pp. 63).

Proceedings of the Twenty-first Annual Convention of the Washington Bankers' Association, 1916 (W. H. Martin, Pioneer National Bank, Ritzville, pp. 206), containing a report of the taxation committee.

Proceedings of the Eighth Annual Convention of the Wyoming Bankers' Association, 1916 (Harry D. Henderson, Wyoming Trust and Savings Bank, Cheyenne, pp. 62).

Public Finance

THE TAX SYSTEM OF CONNECTICUT has recently been the subject of two investigations, one on the part of a special commission appointed by the governor (*State of Connecticut: Report of the Special State Commission Appointed in 1915 on the Subject of Taxation, Submitted to the General Assembly in 1917*, New Haven, 1917, pp. 44, tables), and the other by a committee of the state chamber of commerce (*Report of the Joint Committee on Taxation and State Finance to the Connecticut Chamber of Commerce, Embracing the Report of a Special Study of the Connecticut Tax System*, by Fred Rogers Fairchild, New Haven, 1917, pp. 67, tables). In 1913, as a result of the findings of a special commission appointed in accordance with an act of the legislature of 1911, there had been an overhauling of the corporation tax system of the state. At that time Connecticut adopted a gross earnings tax upon certain public service corporations, telephone, telegraph, express and car companies) and in 1915 the tax was extended to the remaining public service corporations, i.e., railroads and street railways, and to the public utility corporations (gas, electric, and water companies). The public service corporations are taxed upon their gross earnings at rates varying from 2 to 4.5 per cent, with either exemption from local taxation or a deduction from the earnings tax of all such local taxes. The public utility companies pay 1.5 per cent on gross earnings in addition to local taxation of all their property.

The state also taxes the net income of miscellaneous corporations, at the rate of 2 per cent. For this tax the federal income tax machinery is used, Connecticut's law requiring every such corporation to return to the tax commissioner a copy of the return made to the commissioner of internal revenue. In 1916 this tax yielded approximately \$1,600,000 and the administrative expense and effort on the part of the state were exceedingly small.

In addition to the taxes on corporate incomes, the state receives a large revenue from taxes on banking and insurance companies, from the inheritance tax, automobile tax, and the four-mill tax on bonds, notes, mortgages, and certain other forms of intangible personalty. There is also a "state tax" which is apportioned among the towns on the basis of the amount of tax revenue raised in each town. Local revenue comes mainly from the general property tax.

Although the last few years had seen decided improvements in the tax system, there was still in some quarters considerable dissatisfaction and this feeling led to the appointment by the governor, in 1915,

of a special commission to investigate the problems of state revenue and report at the 1917 legislative session. The members of the commission were ex-Governor Simeon E. Baldwin, Mr. F. H. Stadtmueller, a dairy farmer who has frequently served the state in public ways, and Mr. Guy P. Miller, an influential manufacturer.

Interest in tax matters had been so great that in the spring of 1916 the business men, under the leadership of the Connecticut Chamber of Commerce, determined to organize and carry on an independent investigation. A committee was formed, which was later enlarged to include representatives of various interests, such as the insurance companies, the manufacturers, the banking interests, railroads, telephone companies, gas and electric companies, and the grange. Professor Fred R. Fairchild, of Yale University, was employed to conduct the work, with Professor Henry F. Walradt, of Ohio State University, as his assistant. Professor Walradt obtained a half-year's leave of absence from his college position in order to give his entire time to the investigation.

The purpose of the business men's inquiry was to look over the whole tax situation, find where taxpaying ability was, discover to what extent the present system was succeeding in placing the burden of taxation equitably, and to accumulate a body of facts and conclusions which might serve as a basis for recommendations to the state commission or to the legislature. The work was not undertaken in a spirit of opposition to that of the governor's commission. The business men felt, however, that independent experts, less hampered by lack of funds than the legislative commission, might be able to study the problem in a more intensive way and perhaps furnish data which would help the commission in its work for the legislature.

The report of the state commission, issued in February, is a volume of 44 pages. It describes the tax system of the state, criticises it cautiously, and makes some recommendations of changes. The revenue of the state has more than tripled in the last eleven years, jumping from \$3,000,000 in 1905 to \$11,000,000 in 1916. It is the opinion of the commission that this revenue is unnecessarily large and it is suggested that a reduction be made by the state giving up its share of the receipts from liquor licenses, reducing the tax on the towns, and exempting from inheritance taxation bequests to charity. The commission recommends the taxation of insurance companies upon the basis of earnings, which change would also involve some

reduction in taxes. In connection with its consideration of local taxation, the commission suggests increases in the exemptions allowed in certain kinds of personal property, such as musical instruments, books and libraries, household furniture, cash on hand, and bank deposits, together with the entire exemption of watches and jewelry. In order to improve the assessment of the property tax, it is recommended that the state board of equalization be given more authority to employ expert assistance and also that the pay of local assessors be increased.

These four recommendations are the most important suggestions made by the commission. With regard to certain other defects in the Connecticut tax system, particularly the administration of the property tax and the four mill tax on choses in action, the commission was divided in its opinion, one member, Mr. Miller, being unable to agree to the findings of the other two. He especially calls attention to the inefficient assessment of goods and materials of merchants and manufacturers and other kinds of personal property, and recommends the imposition of an income tax to take the place of the property tax on such property.

In the study of the tax system carried on for the Chamber of Commerce, a few topics were chosen for detailed investigation. The first of these is the problem of the administration of the general property tax. The report gives a mass of evidence showing conclusively that this tax does not work well. Although the taxation of real estate may possibly be considered fairly successful, the taxation of personal property is far from being effective or equitable. Detailed statistics show the inadequacy of the system. In the cases of such tangible personalty as farm animals and machinery, household furniture, libraries, musical instruments, and watches, more property escapes taxation than is taxed, while in the case of jewelry taxation is notoriously farcical.

Much intangible property escapes taxation, in spite of the four-mill tax on bonds, notes, and other such forms of wealth. Connecticut's method of taxing bonds and other choses in action has been the subject of study and commendation, but never before has there been a critical statistical investigation of its actual operation. The report of the Chamber of Commerce study gives ample evidence to warrant the conclusion that, while a considerable amount of property is reached, a great deal, probably the great majority, entirely escapes. What the report shows is the amount listed of various kinds of property, and the amount listed from each of the 168

towns of the state. Gross inequalities in the per capita assessment of the various towns are shown, the amounts ranging from zero or a few cents to over \$2,000. Such inexplicable discrepancies between the amounts listed by the towns, considered in connection with the character of their population, are practically uncontrovertible evidence as to the inefficiency of a tax of this sort.

Two other detailed statistical studies were undertaken, one being an investigation of the relative tax burden borne by the public service and public utility corporations, and the other pertaining to the property tax assessment of corporations, particularly the goods and materials of merchants and manufacturers. In connection with this latter topic there was disclosed an enormous amount of inaccuracy in the listing of property and the preparation of tax returns—so much, in fact, as to forbid any clean-cut statistical conclusions being drawn from the data collected. With regard to the taxation of public service and public utility corporations, the report states that the taxes imposed by the state are in the main equitable and that such inequalities as exist are usually found to be due to local property taxes.

Early in the legislative session there appeared among the leaders a disposition to discourage anything in the way of important changes in the existing tax system. Moreover, during the latter part of the session the attention of the legislature was mainly occupied with problems growing out of the war. As a result, no important tax legislation was adopted. The careful scrutiny to which the state tax system has been subjected has, however, not been in vain. Future discussion is sure to arise and the work done this year has put the public in possession of valuable information and will serve as a starting point for further study and legislative action.

FRED ROGERS FAIRCHILD.

Yale University.

The United States Tariff Commission under date of April 16, 1917, made a report on *Interim Legislation* (Washington, pp. 38). Though brief, this report has valuable suggestions for students of American finance.

Hearings and briefs before the Committee on Finance of the United States Senate on *Revenue to Defray War Expenses* (Washington, 65 Cong., 1 Sess., pp. 621) dealing with H. R. 4280 have been printed for the use of the Committee on Finance. The subject-matter is classified under the following headings: war income tax; war excess

profits; war tax on beverages; war tax on cigars and tobacco; public utilities, advertising, and insurance; war tax on manufactures; war tax on admission and dues; war stamp taxes; postal rates; and war customs duties.

The Committee on Finance had previously had prepared for its use the hearings and briefs on *Revenue for Increased Army and Navy Appropriations* dealing with H. R. 20573 (Washington, 64 Cong., 2 Sess., 1917, pp. 203).

The National Bank of Commerce, New York, has circulated a pamphlet under the title, *A Constructive Criticism of the United States War Tax Bill* (June, 1917, pp. 22). The criticism is more particularly directed against the House bill.

The Mechanics & Metals National Bank discusses in a pamphlet *Applying Our Wealth to War* the resources that the United States may apply to the present world conflict (20 Nassau St., New York, 1917, pp. 20). This bank has also made a reprint of *The War Loan Act as Approved April 24, 1917* (pp. 11).

The American Exchange National Bank, of New York, has also issued a reprint of the federal tax law of April 24, 1917, authorizing the issue of bonds, *United States War Bond Issue* (pp. 14).

Robinson & Co. summarizes the historical experience of the United States in regard to *War Loans of the United States* (20 Exchange Place, New York, pp. 41).

In the series of Columbia War Papers, Professor Seligman has made a further contribution to that noticed in the last issue of the REVIEW, a pamphlet on *The House Revenue Bill, a Constructive Criticism* (Series 1, no. 16, pp. 22).

The *Proceedings of the Sixth State Conference on Taxation* held at Battle Creek, Michigan, February 1-2, 1917 (George Lord, secretary of the Michigan State Tax Association, pp. 118) contains papers on: "Taxation of mortgages and bonds," by O. B. Fuller, of Lansing (pp. 16-27); "Michigan laws governing assessments," by Arthur B. Williams, of Battle Creek (pp. 55-72); and "Equipment assessments," by Thomas D. Kearney, of Ann Arbor (pp. 72-82).

The office of the state comptroller of New York (Albany) has begun the publication of a monthly bulletin on *State Finances*, the first number appearing in April of this year. Each issue contains about 15 pages.

The Tax Commission of Ohio has codified and revised the *Tax Laws of Ohio* relating to the assessment of real and personal property (Columbus, 1917, pp. 75).

There has been recently published by the tax commissioner of Connecticut the *Quadrennial Report of Indebtedness and Expenditure of Municipalities* (Hartford, 1917, pp. 141).

The State Tax Board of Virginia, in its Circular No. 7, makes a *Digest of Opinions on Tax Questions Rendered by the State Tax Board from June 1, 1916 to April 20, 1917*.

The *Report of the Tax Commissioner of Massachusetts* for the year ending November 30, 1916 (Boston, 1917, pp. 156) devotes some eighteen pages to the subject of corporation taxation. Special topics considered are taxation of life insurance companies, equalization of assessments of real estate, and taxation of legacies and successions, and stock transfer tax.

The *Fifth Biennial Report of the Minnesota Tax Commission* (Minneapolis, 1916, pp. xv, 399) has a chapter on "The taxation of land values" (pp. 84-122); and chapter 10 deals with "The comparative cost of state government," an investigation conducted by Professor Blakey of the University of Minnesota.

The Guaranty Trust Company of New York has for circulation a pamphlet on the *New York State Franchise Tax on Manufacturing and Mercantile Corporations* (pp. 33) and also a reprint of *The Investment Tax Law and the Mortgage Tax Law* of the state of New York as amended in 1917 (New York, 140 Broadway, pp. 61).

Demography

The federal Bureau of the Census has published *Mortality Statistics, 1915. Sixteenth Annual Report* (Washington, 1917, pp. 707).

Charles F. Gettemy, director of the Bureau of Statistics of Massachusetts, announces that preliminary bulletins will be issued in the near future in regard to the Massachusetts state census of 1915. A typewritten bulletin issued under date of March 7, 1917, deals with the population of the commonwealth as classified by native and foreign born.

A *Preliminary Report* has been made by a Committee concerning Causes of Death and Invalidity in the Commonwealth of Australia (Melbourne, 1916, pp. 6).

In Bulletin No. 207, *Causes of Death by Occupation*, by Louis I. Dublin, the federal Bureau of Labor Statistics publishes the occupational mortality experience of the Metropolitan Life Insurance Company, industrial department, 1911-1913 (pp. 88).

Insurance

WORKMEN'S COMPENSATION IN NEW JERSEY. By an act approved March 27, 1917, New Jersey has followed the lead of New York, Pennsylvania, and other important industrial states in establishing a state rating bureau for workmen's compensation insurance. Some of the most interesting actuarial and statistical problems in the whole field of insurance have developed in connection with the application of workmen's compensation laws, and the state rating bureau seems likely to become an important part of the machinery for the adjustment and control of compensation insurance rates.

Under the former New Jersey law insurance for the compensation risk was left optional with the employer. This was not altogether satisfactory even from the employer's standpoint. Of two competing employers, one might carry insurance and the other not. And the laborer in many instances was left without any certainty that the payments, with recourse for the amount thereof against his insurance company on the part of an employer might leave the injured workman without recourse.

The new law therefore provides for compulsory insurance, which may be provided under the form of so-called "self insurance," or may be placed with an authorized stock or mutual company. In order to come under the "self insurance" provision, which is merely the carrying of his own risk, the employer must satisfy the commissioner of banking and insurance of the permanence and financial standing of his business. If the insurance is carried by a stock or mutual company the employer is nevertheless left primarily liable for compensation payments, with recourse for the amount thereof against his insurance carrier. But the carrier is directly liable to the injured employee in case of the death, insolvency, bankruptcy, etc., of the employer.

The law further provides for the filing with the commissioner of all classifications, rules, rates, and systems of merit rating, none of which shall be effective until approved, by the commissioner of banking and insurance, on the score both of *reasonableness* and *adequacy*. The commissioner is also authorized to "create, organize, and supervise" a "state compensation rating and inspection bureau." A special deputy, appointed by the commissioner, is to preside over this bureau as chair-

man. All compensation insurance carriers are to be members of the bureau, and no insurance can be written except in accordance with the rules and rates determined by the bureau and approved by the commissioner. The expenses of the bureau are to be defrayed by the insurance carriers. All officers, members of committees, and employees of the bureau are subject to the approval of the commissioner. The commissioner is also authorized to employ an actuary and necessary assistants, to fix their compensation, and to call for such reports and information as may be necessary for the determination of the cost of rates. The act does not apply to employers of farm laborers or domestic servants.

It is obvious that this law gives large powers of control over compensation insurance to the insurance commissioner. In Pennsylvania the manager of the rating bureau is the appointee of the insurance carriers. Under the New Jersey law he is a special deputy of the insurance department. It remains to be seen whether the larger powers of control in New Jersey over the process of rate making will be consistent with a smoothly working bureau. Compensation insurance carriers have pretty fully accepted the principle of coöperative rate making, and also the principle of approval of rates by the insurance commission. This spirit of coöperation was abundantly manifested in the national conference on compensation insurance rates held in New York in January, February, and March last, and if in New Jersey the somewhat unusual powers of control over rate making possessed by the commissioner are exercised with restraint, the chances are that the coöperation which has proved to be so necessary in the making of compensation insurance rates will be forthcoming on the part of the carriers.

The commissioner has made an excellent beginning in the selection of Mr. W. W. Greene as special deputy and chairman. Mr. Green has had valuable experience with the New York Workmen's Compensation Commission and with the Colorado Industrial Commission, and is an actuary and statistician of recognized standing.

WALTER M. ADRIANCE.

Princeton University.

The federal Bureau of Labor Statistics has made an exhaustive compilation of *Workmen's Compensation Laws of the United States and Foreign Countries* (Washington, Jan., 1917, No. 203, pp. 961). This report is presented in three parts. The first reviews the workmen's compensation commissions of the various states; the second summarizes the principal features of the workmen's compensation laws

of forty-six foreign countries; and the third is the text of the workmen's compensation laws of the various states and the federal statute.

The National Industrial Conference Board has issued a pamphlet on the *Workmen's Compensation Acts in the United States: Legal Phase* (15 Beacon St., Boston, Apr., 1917, pp. 62). The preface states that it is intended in later reports to discuss the operation of these acts from the medical, economic, and administrative standpoints. Headings of the various chapters in this particular report are: 1, The adoption and growth of the compensation principle; 2, The form and validity of state legislation; 3, The persons to whom compensation applies; 4, The notice of injury; 5, The assurance of systematic relief; 6, Accident and disease; 7, "Misconduct" by employer and employee; 8, The exclusiveness of compensation; 9, The administration of compensation acts; 10, Conclusions and suggestions.

The Nevada Industrial Commission presents a *Brief* showing the effect of 1917 amendments to the Nevada industrial insurance act of 1913 (Carson City, 1917, pp. 8).

An Act creating the Industrial Commission of Utah providing for Workmen's Compensation and for other purposes has been printed as a separate (Salt Lake City, pp. 39).

The Metropolitan Life Insurance Company has for circulation the following pamphlets: *General Population and Insurance Mortality Compared*, a discussion of the mortality experience of the Metropolitan Life Insurance Company, Industrial Department, and of the general population, 1915, prepared by George H. Van Buren (pp. 7); *The Application of the Statistical Method to Public Health Research*, by Louis I. Dublin, reprinted from the "American Journal of Public Health" (p. 14); and *The Vital Statistics of Old Age*, by Louis I. Dublin, reprinted from the "New York Medical Journal" of May 19, 1917 (pp. 6).

The Insurance Society of New York has printed *The Evolution of Employers' Liability Insurance*, an address delivered before the society by Mr. Edmund Dwight (New York, 1917, pp. 11).

The Organization and Management of a Farmers' Mutual Fire Insurance Company is described by V. N. Valgren in Bulletin No. 530 of the United States Department of Agriculture (Washington, May 8, 1917, pp. 34).

The special commission appointed by Governor Johnson of Califor-

nia to investigate social insurance has made its *Report* under date of January 25, 1917 (Sacramento, pp. 340). Several chapters deal with: The findings of the commission; The California survey; Health insurance in fourteen countries; Social results of social insurance; Existing facilities for insurance of wage-workers in the United States; Social insurance movement in the United States; and Estimates of cost.

A *Report of the Special Commission on Social Insurance* in Massachusetts also appeared early this year (Boston, Feb., 1917, House Doc. 1850, pp. 311).

A report on *Social Insurance with Special Reference to Compulsory Health Insurance*, made by Dr. John Franklin Crowell for the Chamber of Commerce of the State of New York, is published as a supplement to the *Monthly Bulletin* (65 Liberty St., New York, pp. 92).

The subject of *Compulsory Health Insurance* is also discussed by Magnus W. Alexander in a pamphlet representing in substance the material presented in hearings before the legislature of New York on March 7, and of Massachusetts on March 13, 1917 (Magnus W. Alexander, West Lynn, Mass., pp. 15).

Mr. John T. Stone, president of the Maryland Casualty Company, contributes to the further discussion of this subject in *Problems Concerning the Accident and Health Insurance Business*, an address published by the Insurance Society of New York (pp. 14).

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by W. M. Adriance)

COYAJEE, J. C. *An Indian Kammeralist*. Bengal Econ. Journ., Jan., 1917. Pp. 16.

A study of the economic views of the Indian writer Kantilya. This early thinker shows very striking parallels in doctrine with the European cameralists, and in some particulars considerably surpasses them.

GUYOT, Y. *La doctrine de l'utile*. Journ. des Econ., Apr. 15, 1917. Pp. 17.

LECARPENTIER, G. *La doctrine économique du Professeur A. Wagner*. Rev. Sci. Pol., Dec. 15, 1916. Pp. 25.

An extended review of Wagner's economic system. The occasion of the review is the publication, or rather the completion, of a five volume translation of Wagner under the title *Fondements de l'Economie Politique*. The review concerns itself largely with making clear the middle ground taken by Wagner and the socialists of the chair between doctrinaire individualism on the one hand and doctrinaire socialism on the other.

SCHELLE, G. *L'oeuvre de Paul Leroy-Beaulieu*. Journ. des Econ., Apr. 15, 1917. Pp. 17.

A sympathetic review of the half century of work of the eminent French economist.

Economic History, United States

(Abstracts by E. L. Bogart)

BARNARD, B. W. *The private coinage of gold tokens in the South and West*. S. Atlantic Quart., Apr., 1917. Pp. 8.

Covers the period 1830 to 1851.

BEALL, T. P. *Pioneer reminiscences*. Wash. Hist. Quart., Apr., 1917. Pp. 8. Author took part in the mine rushes, 1857-1865.

BELL, H. C. *The West-India trade before the Revolution*. Mag. of Hist., Nov.-Dec., 1916. Pp. 9.

BUTLER, A. W. *Notes concerning Brookville one hundred years ago*. Ind. Mag. of Hist., June, 1917. Pp. 11.

CHRISTIAN, A. K. *The tariff history of the Republic of Texas*. S. W. Hist. Quart., Apr., 1917. Pp. 26.

Covers the decade 1835-1845. First instalment.

COTTERILL, R. S. *The telegraph in the South, 1845-1850*. S. Atlantic Quart., Apr., 1917. Pp. 6.

FISH, C. R. *The northern railroads, April, 1861*. Am. Hist. Rev., July, 1917. Pp. 16.

GARDNER, H. *Coöperation among the Mormons*. Quart. Journ. Econ., May, 1917. Pp. 39.

Traces an informal coöperation from 1847 to 1868; coöperative stores from 1868 to 1890; and coöperative industrial enterprises since 1890.

JEFFERSON, M. *Our trade in the great war*. Geog. Rev., June, 1917. Pp. 7.

Covers the period 1911 to 1916.

KING, I. F. *Flat boating on the Ohio River*. Ohio Arch. & Hist. Quart., Jan., 1917.

KING, R. S. *Silver mines of Ohio Indians*. Ohio Arch. & Hist. Quart., Jan., 1917.

LAPRADE, W. T. *A new epoch*. S. Atlantic Quart., Apr., 1917. Pp. 10.

Present political and economic changes mean the passing of an old and the ushering in of a new epoch.

MECKLIN, J. M. *The development of the slave status in American democracy*. Journ. of Negro Hist., Apr., 1917. Pp. 21.

The first part of a thoughtful study, covering the colonial period.

MILLS, W. C. *Explorations of the Westenhaver mound*. Ohio Arch. & Hist. Quart., Apr., 1917. Pp. 41.

NELSON, N. C. *Kentucky and her care men*. Am. Museum Journ., Apr., 1917. Pp. 15.

An inquiry into the aboriginal inhabitants of this state.

NETZ, J. *The great Los Angeles real estate boom of 1887*. Ann. Pub. of Hist. Soc. of Southern California, 1916.

PARKER, A. C. *Problems of race assimilation in America, with special reference to the American Indians*. Am. Indian Mag., Oct.-Dec., 1916.

PROVINE, W. A. *Lardner Clark, Nashville's first merchant and foremost citizen*. Tenn. Hist. Mag., Mar., 1917. Pp. 23.

An account of trade in Tennessee at the end of the eighteenth century. First instalment.

RAMSDELL, C. W. *The Confederate government and the railroads*. Am. Hist. Rev., July, 1917. Pp. 17.

RAMSDELL, C. W. *Internal improvement projects in Texas in the fifties*. Miss. Valley Hist. Rev., Apr., 1917. Pp. 11.

Describes the building of land grant railroads by private corporations. The plan to grant state credit was rejected.

ROBERTSON, J. R. *Sectionalism in Kentucky from 1855 to 1865*. Miss. Valley Hist. Rev., June, 1917. Pp. 15.

ROSEBOOM, E. H. *Ohio in the presidential election of 1824*. Ohio Arch. & Hist. Quart., Apr., 1917. Pp. 73.

Contains much of economic interest.

SHEPARD, C. I. *The Connecticut Land Company: a study in the beginnings of colonization of the Western Reserve*. W. Reserve Hist. Soc., Tract No. 96 (1916).

SIOUSSAT, ST.G. L. *Memphis as a gateway to the West: a study in the beginnings of railway transportation in the old Southwest.* Tenn. Hist. Mag., Mar., 1917. Pp. 27.

TEAKLE, T. *History and constitution of the Icarian community.* Iowa Journ. of Hist. & Pol., Apr., 1917. Pp. 73.

A translation of Etienne Cabet's book on this subject.

THOMPSON, W. M. *When Washington toured New England (1789).* Mag. of Hist., Nov.-Dec., 1916. Pp. 8.

Second paper.

THORSTEINSON, E. *The Doukhobors in Canada.* Miss. Valley Hist. Rev., June, 1917. Pp. 46.

The presence of this sect has given rise to some perplexing immigration problems.

The beginning of cotton cultivation in Georgia. Ga. Hist. Quart., Mar., 1917.

Reprints of early newspaper articles.

The future of industry. Unpopular Rev., Apr.-June, 1917. Pp. 22.

An analysis of industrial organization and of its possible future.

Pioneer trails across Iowa. Journ. of Hist., Jan., 1917.

Economic History, Foreign

(Abstracts by Clive Day)

BELL, H. *L'industrie britannique après la guerre.* Journ. des Econ., Apr., 1917. Pp. 22.

Translation of a paper presented to the Scottish Economic Society by Sir Hugh Bell.

BROWN, A. E. *The economic conditions of the cotton weavers of the Bankura district.* Bengal Econ. Journ., Jan., 1917. Pp. 6.

EINAUDI, I. *Cesare Jarach.* Rif. Soc., Jan.-Feb., 1917. Pp. 4.

Obituary of one of the most promising of younger Italian economists, killed in the war.

G. M. *Cesare Jarach.* Giorn. d. Econ., Jan., 1917. Pp. 2.

GERSON, A. J. *Limitations of gild monopoly.* Am. Hist. Rev., Apr., 1917. Pp. 3.

Shows numerous exceptions to gild monopoly in London.

GIRZIOTTI-KRETSCHMANN, J. *La Russia e la sua politica commerciale dopo la guerra.* Rif. Soc., Mar.-Apr., 1917. Pp. 9.

GUYOT, Y. *La politique économique britannique actuelle.* Journ. des Econ., Mar. 15, 1917. Pp. 26.

Descriptive and critical.

HEYKING, B. A. *The economic resources of Russia, with special reference to British opportunities.* Journ. Royal Stat. Soc., Mar., 1917. Pp. 25.

A useful statistical survey, with bibliographical information, by the consul-general for Russia in the United Kingdom.

LIPSON, E. *The black death*. Econ. Journ., Mar., 1917. Pp. 8.

A review of Miss Levett's monograph in the Oxford studies.

MANN, H. *The economics of a Deccan village*. Indian Journ. Econ., Dec., 1916. Pp. 25.

MICHELS, R. *Alberto Caroncini*. Rif. Soc., Jan.-Feb., 1917. Pp. 7.

Obituary of a young economist dead in the war.

MUKERJI, K. *The transferability of occupancy holdings in Bengal*. Bengal Econ. Journ., Jan., 1917. Pp. 20.

Part I of a study in the history of Indian land tenure.

PRATO, G. *Forze economiche e forze morali nella restaurazione post-bellica*. Rif. Soc., Nov.-Dec., 1917. Pp. 24.

RAFFAEOVICH, A. *Effects of the war on economic life of Russia*. Econ. Journ., Mar., 1917. Pp. 7.

ROTA, R. *Libertà di commercio interno e di lavoro negli economisti piemontesi nel secolo XVIII*. Giorn. d. Econ., Mar., 1917. Pp. 18.

ST. ILITCH, M. *The industries of Serbia*. Econ. Journ., Mar., 1917. Pp. 6.

TOWER, W. S. *South America and the war*. Journ. Pol. Econ., May, 1917. Pp. 11.

WELLS, B. W. *Banking in old Athens*. Sewanee Rev., Apr., 1917. Pp. 19.

Descriptive sketch based on Demosthenes.

Les répercussions économiques de la guerre en Hollande. Monde Econ., Mar. 10, 1917. Pp. 2.

Agricultural Economics

(Abstracts by John Lee Coulter)

BATTISON, W. J. *Annual wool review for 1916*. Bull. Nat. Assoc. Wool Mfrs., Jan., 1917. Pp. 61.

A compilation of statistical records for 28 consecutive years comprising production, consumption, exports and imports. Wool and mutton are considered with chart of fluctuating wool prices.

BOYLE, J. E. *Notes from an agricultural field trip across North Dakota*. Quart. Journ. Univ. N. Dak., Jan., 1917.

A statement of economic and social conditions as observed in traveling across North Dakota.

BULKLEY, R. J. *The federal farm loan act*. Journ. Pol. Econ., Feb., 1917. Pp. 19.

A statement of facts leading to The Federal Farm Loan act with a description of the system.

BUTTERFIELD, K. I. *The relationship of New England agriculture to manufacturing*. Printed by the National Association of Cotton Manufacturers (Boston), April, 1916. Pp. 10.

A discussion of the general relation of agriculture to manufacturing with application to New England conditions. Methods of solving some of the problems are suggested.

CARVER, T. N. *Standardization of marketing*. Quart. Journ. Econ., Feb., 1917. Pp. 4.

An argument in favor of fixing standards of quality and quantity whenever possible.

CURTLE, W. H. R. *Enquiry into the rate of wages per acre in England, 1913-1914*. Intern. Rev. Agri. Econ., Aug., 1916.

A study of the wages per acre on 450 farms of different types and sizes in several counties.

CURTLE, W. H. R. *Enquiry into the rate of wages per acre in England, 1913-1914*. Intern. Rev. Agri. Econ., Oct., 1916. Pp. 14.

A statement of the status of female labor, a discussion of the economy of high and low wages and tables showing the relation of yields and types of farms to wages.

FAY, C. R. *German and British agriculture*. Econ. Journ., Dec., 1916. Pp. 4.

A very good report contrasting German and English agriculture. The author shows why German agriculture is superior to that of English.

FRIEDMANN, G. *Sul frazionamento dei terreni e l'intensificazione della cultura*. Rif. Soc., Aug.-Sept.-Oct., 1916. Pp. 13.

An interesting experiment in the cultivation of small holdings in Modena.

GARINO-CANINA, A. *Lineamenti della politica granaria moderna*. Rif. Soc., Aug.-Sept.-Oct., 1916. Pp. 28.

A study of the various ways in which modern states control the grain industry.

GILLETTE, J. M. *Mitigating rural isolation*. Quart. Journ. Univ. N. Dak., Jan., 1917. Pp. 13.

A comprehensive discussion of rural isolation with suggestions for improving conditions.

JENKINS, J. E. *Land settlement in Australia*. Intern. Rev. Agri. Econ., July, 1916. Pp. 8.

A comprehensive statement of the general system of land settlement in Victoria, Australia.

JOHNSON, O. R. and FOARD, W. E. *Size of farm business*. Missouri Sta. Bul. 140, April, 1916. Pp. 40.

A popular bulletin based upon more than 700 farm survey records, showing the influence of size of farm business upon efficiency and profits. Illustrated.

KAARSEN, A. C. *Ententens Ernäringsproblemer*. Nat. ök. Tids., Nov.-Dec., 1916. Pp. 31.

Regards the food problem for the entente as serious.

KENT, W. H. *"Future" trading and the farmer*. Annalist, Feb. 26, 1917.

An argument in favor of "future" trading, attempting to show how it benefits the producer.

LUACES, R. L. *Proyecto de ley agraria para Cuba*. Ref. Soc. (Cuba), Aug., 1916. Pp. 10.

MARCH, A. R. *Will Germany's food supply suffice until another crop?* Econ. Wld., Dec. 30, 1916. Pp. 6.

A general discussion of the production and importations of foods and fertilizers by Germany.

PATERSON, J. W. *Land settlement and the provision of credit in western Australia*. Intern. Rev. Agri. Econ., Jan., 1917. Pp. 11.

A careful examination of the present status of agriculture, and the possibilities of development in western Australia.

PRATO, G. *I redentori delle terre incolte*. Rif. Soc., Jan.-Feb., 1917. Pp. 20.

Examination of the project to extend the area of cultivation in Italy.

PEDRO, B. *The dairy industry in Argentina and plans for its future development*. Anales de la Sociedad Rural Argentina, Mar.-Apr., 1916. Pp. 6.

The development of the dairy industry in Argentina since 1894. Statistical data are presented.

POPE, J. E. *Can the farmer realize higher prices for his crops by holding them?* Quart. Journ. Econ., Aug., 1916. Pp. 26.

A comprehensive study of the gains and losses to the farmer from storing crops. Statistical evidence is presented.

PRINGLE, J. M. *Agricultural distress in Brahmanbaria*. Bengal Econ. Journ., Sept., 1916. Pp. 11.

A general statement of the difficulties the people of Brahmanbaria have in tiding themselves over in years of famine.

ROHTLIEB, C. *Am gränsen für jordbrukets intensifiering*. Ek. Tids., No. 6, 1916. Pp. 34.

A study of the practicability of a greater degree of intensification in agriculture under existing conditions in Sweden.

VAN DINE, D. L. *The relation of malaria to crop production*. Sci. Mo., Nov., 1916. Pp. 9.

A study of the loss of time and reduced efficiency of labor caused by malaria.

VOLD, L. *Some reasons why North Dakota should adopt the uniform sales act*. Quart. Journ. Univ. N. Dak., Jan., 1917. Pp. 32.

The author points out very definitely the weak places in the present code of North Dakota, the benefits to be derived from the adoption of the uniform sales act, and answers the objections to its adoption.

WOHLIN, N. *Am den osunda jordspekulationen och atgårdur för dess begänsning*. Ek. Tids., No. 4, 1916. Pp. 22.

Favors legislation to restrict speculation in land to prevent waste and to keep the ownership of land to a greater extent in the hands of its tillers.

WACHA, D. E. *Agricultural banks in India*. Indian Journ. Econ., Jan., 1916. Pp. 37.

A discussion of the present status of the ryot of India, the failure of private banks and coöperative credit societies, and a suggestive general plan for agricultural banks.

The Agrarian question in Bosnia and Herzegovina. Intern. Rev. Agri. Econ., Oct., 1916. Pp. 14.

A detailed study of land tenure in Bosnia and Herzegovina during the last half of century.

Discussion as to the method of effecting valuation. Il Monitore Tecnico, Milan. XXIIInd Year, No. 7, March 10, 20, 1916. Pp. 5.

A examination of the fundamental principles of the analytic method in valuation.

The German agricultural coöperative societies in 1915. Intern. Rev. of Agri. Econ., Oct., 1916. Pp. 8.

The development of coöperative societies, and the work of the National Federation of German Agricultural Coöperative Societies during the year 1915. The figures presented are incomplete.

Coöperation in agriculture in 1914. Intern. Rev. Agri. Econ., Sept., 1916.

Statistical data are presented showing the status of the agricultural coöperative societies in the United Kingdom and their growth since 1904.

The coöperative sales of live stock in Germany. Intern. Rev. Agri. Econ., Dec., 1916. Pp. 10.

A brief discussion of the development of coöperative societies for the selling of livestock.

The organization of the working of boys' and girls' agricultural clubs in the United States. Intern. Rev. Agri. Econ., Nov., 1916. Pp. 12.

A general statement of the purpose, organization and development, and methods of conducting boys' and girls' agricultural clubs.

The work of the Jewish agricultural and industrial aid society. Intern. Rev. Agri. Econ., Sept., 1916. Pp. 14.

A brief account of the origin, development, purposes and achievements of the Jewish agricultural and industrial aid society up to December, 1915.

Facts about farm mortgage debt. Journ. Am. Bankers Assoc., Dec., 1916.

Extracts from the annual address of President F. W. Thompson to the convention of the Farm Mortgage Bankers Association. President Thompson undertook to prove that the motive of rural credit legislation was largely political and not generally needed.

Commerce

(Abstracts by H. R. Tosdal)

ANDERSON, B. M. *The existing machinery of the grain trade and the food census.* Econ. Wld., June 9, 1917.

Develops proposition to ascertain by board of experts the available supplies of grain and the probable extent of demand for purposes of price regulation by government.

BARETTI, G. *Alcune considerazioni sul credito marittimo*. Riv. di Sci. Bancaria, Oct.-Dec., 1916. Pp. 8.

BENEDICT, W. *The Pacific Mail*. Forum, Nov., 1916. Pp. 20.

Historical sketch of rise and development of the Pacific Mail S. S. Co., which gives little attention to government shipping subsidies received.

BERGLUND, A. *The war and trans-Pacific shipping*. Am. Econ. Rev., Sept., 1917. Pp. 15.

BORGATTA, G. *I "cicli degli affari."* Rif. Soc., Jan.-Feb., 1917. Pp. 13.

An examination of the recent literature on business cycles.

DAVIDSON, J. M. *German trade expansion: its methods and its tendencies*. (Concluded.) Journ. Inst. Bankers, Mar., 1917.

Concluding instalment deals with German methods of fostering export trade by preferential railway rates, export bounties, subsidies and the like.

GOEMANN, W. P. *Coöperative selling vs. the middleman in the upbuilding of our foreign commerce*. Econ. Wld., Apr. 21, 1917. Pp. 5.

Argues that present system of distribution through middleman is more effective in developing export trade than proposed coöperative combinations of manufacturers favored by the Federal Trade Commission in a recent report.

GOON, E. T. *The future of British shipping*. Finan. Rev. Rev., Mar., 1917.

Writer thinks British shipping supremacy is threatened by current revival of American shipping unless there is "active coöperation between labor and capital and the State."

LAWRENCE, J. S. *The international trade of the United States in textiles*. Econ. Wld., Apr. 14, 1917. Pp. 3.

Parts of an address emphasizing foreign trade opportunities for American textiles and giving basic principles for their development.

PAWLOWSKI, A. *L'industrie minière en France pendant les deux premières années de la guerre*. Journ. des Econ., Mar. 15, 1917.

An illuminating study of the decline in the French production of coal, iron, and other minerals. War conditions, scarcity of labor, and lack of transportation facilities are analyzed as causes.

PORRI, V. *Esiste ancora il commercio internazionale durante la guerra?* Rif. Soc., Jan.-Feb., 1917. Pp. 15.

VUOLI, R. *L'intervento degli enti pubblici nella delimitazione dei prezzi dei generi di prima necessità*. Riv. Intern., Dec., 1916. Pp. 34.

Continuation of a study of the modes of food control established in Italy for war purposes.

The coöperative sale of wool. Intern. Rev. Agri. Econ., Feb., 1917.

A rather detailed account of the methods and results of the coöperative sale of wool by Canadian growers, with particulars as to aid rendered by government. Though still limited in application, the plan is said to have proved successful.

The future of foreign trade. New Statesman, May 26, 1917.

Writer perceives the coming in the post-war reconstruction of a fundamental change in the methods and organization of foreign trade whereby haphazard exporting by individual traders will give way to an organized system of "reciprocal imports."

The wool industry—its commercial problems. Bull. Nat. Assoc. Wool. Mfrs., Apr., 1917. Pp. 10.

An extended and favorable review of Mr. Cherington's recent book on the wool industry by the secretary of the National Association of Wool Manufacturers.

Public Utilities

(Abstracts by Ralph E. Heilman)

CONWAY, T. *Up-state New York lines need financial relief.* Elec. Ry. Journ., June 9, 1917.

Asserts that the companies must curtail quantity and lessen quality of service, or secure a higher rate of fare, if they are to avoid financial disaster.

DOOLITTLE, F. W. *The economic aspects of franchises.* Journ. Eng. Club of St. Louis, Mar.-Apr., 1917.

Characterizes the following four periods in the development of utility franchises: (1) general misunderstanding as to facts; (2) general misunderstanding as to motives; (3) attempted arbitration by governmental agencies; (4) a correct understanding of mutual interests involved.

HUNTER, M. H. *The early regulation of public service corporations.* Am. Econ. Rev., Sept., 1917. Pp. 13.

KING, C. L. *National issues in local street railway franchises.* Pro. Am. Elec. Ry. Accountant's Assoc., 1916.

The larger issues at stake in the granting of local franchises.

LAVINE, A. L. *Public regulation v. public operation: some legal aspects.* Case & Comment, Mar., 1917.

The effort in regulating utilities should be to direct the current of human endeavor, not to thwart it.

LEE, I. L. *Interborough solicits complaints.* Elec. Ry. Journ., Apr. 7, 1917.

Describes the attempt of the Interborough Rapid Transit Company to adjust complaints and to secure the coöperation of the public.

NASH, L. R. *Principles of public utility financing.* Stone & Webster Journ., May, 1917.

The various types of public utility securities, the conditions under which each may be issued, the distribution of securities, etc.

WILSON, T. *Fort Wayne municipal plant.* Power, Apr. 24, 1917.

Asserts that this municipal plant has saved consumers more than double their investment in seven years.

Analyses of P. R. T. proposal. Elec. Ry. Journ., Apr. 7, 1917.

A criticism of the Philadelphia Rapid Transit Company's plan for the lease and operation of the new city-built high-speed lines.

Chicago traffic, value and finances. Elec. Ry. Journ., Apr. 14, 1917.

Describes the methods used by the Parsons Commission in checking travel, the cost and value of the elevated lines, and gives a summary of the financial plan for the proposed unified traction system.

Cincinnati's rapid-transit ordinance. Elec. Ry. Journ., Apr. 7, 1917.

A description of the plan for unified electric railway operation, voted on by the citizens of Cincinnati, on April 17th.

Los Angeles hydro-electric power plant. Munic. Journ., Mar. 1, 1917.

First utilization of municipal plants for utilizing fall in aqueduct.

Putting across the skip stop in Baltimore. Elec. Ry. Journ., June 2, 1917.

How the United Railways of Baltimore has convinced its patrons of the desirability and the time saving features of the skip stop.

Springfield company wants 6-cent fare. Elec. Ry. Journ., June 2, 1917.

Springfield (Mass.) street railway contends that it must be permitted to charge a six-cent fare, on account of increasing costs.

Railways and Transportation

(Abstracts by Julius H. Parmelee)

ACWORTH, W. M. *English railways under war conditions.* Outlook, May 16, 1917. Pp. 2.

Draws two conclusions from English experience: If American roads are taken over by government for war purposes, they should (1) be operated under present management, and (2) be guaranteed the normal rate of return on their property.

ADLER, W. *The legs of an army.* Outlook, Apr. 18, 1917. Pp. 3.

Function of American railways in time of war.

AILIX, G. *Les résultats de 1916.* Journ. des Trans., Apr. 8, 1917. Pp. 5.

ARRAGON, A. V. *Railroad coördination.* Journ. Pol. Econ., June, 1917. Pp. 19.

Plan to strengthen railroad credit through systematic correlation of railways under government supervision.

BELNAP, H. W. *The safety appliance standards, their purpose and the reasons underlying their fixed and definite location.* Pro. St. Louis Ry. Club, May 11, 1917. Pp. 17.

BROWN, A. C. *New ocean terminals at Halifax.* Ry. Rev., May 26, June 9, 1917. Pp. 5, 6.

Illustrated with photographs and diagrams.

BUNN, C. W. *Federal incorporation of railway companies.* Harvard Law Rev., Apr., 1917, Pp. 6.

Holds that Congress has large powers in matter of railway incorporation.

CARMAN, E. C. *How to avoid government ownership of the railroads.* Journ. Pol. Econ., Apr., 1917. Pp. 11.

CHEATHAM, B. F. *The military aspect of railway preparedness.* Pro. Pacific Ry. Club, Apr., 1917. Pp. 8.

DIXON, F. H. *How to study a railroad report.* R. M. I. S. Journ., Apr.-May, 1917. Pp. 2.

HULL, H. *Discrimination under the act to regulate commerce.* Am. Law Rev., Mar.-Apr., 1917. Pp. 21.

HUNGERFORD, E. *Whose freight shall have the right of way?* Nation's Business, July, 1917. Pp. 6.

The priority problem in war time.

JACKMAN, W. T. *Canada's railroad problem.* Monetary Times, Apr. 27, May 4, 11, 1917. Pp. 21.

Pamphlet reprint of 21 pages. Analyzes government ownership proposition for Canada.

LAVINE, A. L. *Public regulation v. public operation: some legal aspects.* Case & Comment, Mar., 1917. Pp. 6.

LORENZONI, G. *L'evoluzione nell'industria dei trasporti marittimi negli ultimi cent'anni.* Rif. Soc., Mar.-Apr., 1917. Pp. 20.

A broad survey of the principal stages of the development of shipping.

MERZ, C. *Priority in shipment.* New Republic, June 23, 1917. Pp. 3.

NOUVION, G. DE. *Les chemins de fer français en 1916.* Journ. des Econ., May 15, 1917. Pp. 21.

PARMELEE, J. H. *Operation of British railways in the war.* Ry. Age Gaz., Apr. 27, 1917. Pp. 3.

Four recent developments described: economics, 50 per cent increase in passenger rates, entry of Irish railways into war scheme, and freight-car pooling.

PAYEN, E. *Les grandes compagnies françaises de chemins de fer en 1916.* II. *Les dépenses et le produit net.* L'Econ. Franç., May 19, 1917. Pp. 2.

PAYNE, J. L. *Canadian commission against public ownership.* Ry. Age Gaz., May 4, 1917. Pp. 4.

Analysis of recent findings of special commission appointed to study Canadian railway situation.

PLUMB, G. E. *The legal basis for the valuation of railroad properties advanced by the organized employees of steam railroads.* Utilities Mag., May, 1917. Pp. 15.

Summary of brief filed before Interstate Commerce Commission on behalf of the four railway brotherhoods.

POWELL, T. R. *Due process and the Adamson law.* Columbia Law Rev., Feb., 1917. Pp. 13.

RIPLEY, W. Z. *The supreme court and the railway brotherhoods.* Am. Rev., May, 1917. Pp. 3.

Analysis of recent decision in the case of the eight-hour law.

STONE, A. J. *The operating side of a railroad.* Ry. & Locomotive Engg., June, July, 1917. Pp. 5.

SWANSON, W. W. *Report of the Royal Commission to inquire into railways and transportation in Canada.* Am. Econ. Rev., Sept., 1917. Pp. 8.

WADE, H. T. *Railway transportation in war.* Am. Rev. Rev., Mar., 1917. Pp. 3.

WATKINS, E. *Has a shipper who has been denied relief by the Interstate Commerce Commission any remedy?* Columbia Law Rev., Jan., 1917.

WILSON, H. R. *British railways in war time.* Ry. Rev., Apr. 21, May 12, June 7, 1917. Pp. 2, 3, 3.

Alaska transportation lines vindicated by order. Ry. & Marine News, July, 1917. Pp. 3.

Analysis of the so-called "Alaska investigation" report of the Interstate Commerce Commission.

Electric railways in war time. Elec. Ry. Journ., May 12, 1917. Pp. 4.

What has been done in Canada.

Government ownership in foreign countries. Ry. Age Gaz., May 18, 1917.

Outline of testimony of W. M. Acworth before Newlands joint congressional committee.

To increase transportation efficiency. Ry. Age Gaz., June 1, 1917. Pp. 4.

Shippers appoint 23 regional committees to coöperate with government and railways in securing transportation efficiency in war.

Michigan and the Pere Marquette. Pere Marquette Mag., Mar., Apr., May, June, 1917. Pp. 6, 6, 5, 3.

Brief historical sketch of Pere Marquette railway system.

"Political" railways. A lesson from Victoria. South African Railways & Harbours Mag., Mar., 1917. Pp. 2.

Progress on government railway in Alaska. Ry. Age Gaz., Apr. 20, 1917. Pp. 5.

War conditions and the electric railways. Elec. Ry. Journ., Apr. 28, 1917.

Many electric railways are "doing their bit."

Les chemins de fer de l'Asie turque. Bull. des Transports Intern. par Chemins de Fer, Mar., Apr., May, June, 1917. Pp. 10, 5, 6, 10.

La crise des transports en Allemagne. Journ. des Trans., Mar. 24, 1917.

Chiefly devoted to the problem of car shortage.

Accounting

(Abstracts by Martin J. Shugrue)

BECK, H. *Theory and practice.* Journ. Account., July, 1917. Pp. 7.

Considers the proper treatment of discount on securities sold and cash repair funds from both the theoretical and practical points of view.

CHAPMAN, R. M. *Serial bonds versus sinking fund bonds.* Am. City, Mar., 1917. Pp. 2.

CLADER, W. A. *Electric utilities accounting*. Journ. Account., May, 1917. Pp. 11.

Classification and operation of a system of accounts for electric utilities.

CORLISS, W. M. *Navy yard cost accounting*. Journ. Account., July, 1917.

Explains with considerable detail the cost system of one of the largest navy yards of the United States with particular reference to the methods of recording and tabulating labor and material costs.

DUNN, H. A. *Accounting inconsistencies and fallacies*. Pro. Am. Elec. Ry. Acct. Assoc., 1916. Pp. 10.

FEDDE, A. S. *Mis-stated current assets*. Journ. Account., June, 1917. Pp. 5.

Why "current assets" must be scrutinized carefully. Explains common methods of overstating the value of the various items comprising "current assets."

GANTT, H. L. *The basis of manufacturing costs*. Indus. Management, June, 1917. Pp. 2.

Advocates a separation of expense items into those that do and those that do not contribute to production. Why the machine-hour rate method of applying indirect expenses should be employed wherever possible and otherwise a uniform man rate based on man hours.

GILL, F., and COOK, W. W. *Principles involved in computing the depreciation of plant*. Surveyor & Munic. & County Engr., Feb. 9, 1917. Pp. 2.

HORSON, H. C. *Construction records and accounts*. Journ. Account., July, 1917. Pp. 18.

Principles governing the proper charges and credits to capital or property accounts in the case of public service companies. Also takes up elements of costs and the methods for recording these costs.

LEEDS, E. P. *Analyses of gas corporation accounting*. Gas Age, Feb. 15, Mar. 1, 1917. Pp. 2, 1.

MCCORMACK, P. H. *Continuous valuation machinery*. Journ. Inst. Actuaries, Apr., 1917. Pp. 12.

Explains and illustrates with forms accurate methods of showing in the company's records continuous valuations on various types of life insurance policies.

MIDDLEDITCH, L. *Calculation of continuous compound interest*. Journ. Account., May, 1917. Pp. 11.

Develops and charts certain compound interest formulas and shows their practical importance by means of tables.

NEWCOMER, W. *Analysis of a credit statement*. Investment Weekly, July 7, 1917. Pp. 3.

President of the National Exchange Bank of Baltimore points out certain principles and policies to guide bankers in the determination of a credit risk.

WILSON, G. *The fourth factor in cost accounting*. Journ. Account., May, 1917. Pp. 5.

The necessity and importance of considering spoilage as a separate factor of manufacturing cost in many plants. Common plan of charging this cost to profit and loss or to overhead not always satisfactory.

American Institute's June examinations. Journ. Account., July, 1917. Pp. 20.

Examinations cover three subjects, auditing, commercial law, and accounting theory and practice.

Plant depreciation; a comparison of the four methods of calculating the allowance. Iron Age, Mar. 15, 1917. P. 1.

Saving labor in the accounting department. Ry. Age Gaz., June 22, 1917.

Roads are substituting women and various labor saving machines which women can run on account of liability of male employees to draft.

Uniform accounting. Federal Reserve Bull., Apr., 1917. Pp. 25.

A tentative proposal submitted by the Federal Reserve Board for a uniform system of accounting to be adopted by manufacturing and merchandising concerns. Reprinted in *Journal of Accountancy*, June, 1917.

Investments

(Abstracts by Author S. Dewing)

CLAY, P. *Civil War stock market.* Invest. Wkly., June 9, 1917.

Very interesting comparison. Valuable for class study.

CLAY, P. *Cotton mill stocks.* Invest. Wkly., Apr. 14, 1917.

Brief digest with statistics.

CLAY, P. *Interborough Metropolitan collateral trust 4 1/2's.* Invest. Wkly., Apr. 28, 1917.

Altogether too optimistic survey of junior securities of this unfortunate company.

CLAY, P. *Irrigation district bonds.* Invest. Wkly., June 2, 1917.

Good article. But does not say "beware" strong enough.

CRAWFORD, A. *Fertilizer stocks.* Invest. Wkly., Apr. 21, 1917.

Investment position discussed, but shows great prosperity of three companies.

DEWING, A. S. *Railway equipment obligations.* Am. Econ. Rev., June, 1917. Pp. 25.

FAULKNER, J. L. *Ohio Cities Gas.* Invest. Wkly., Apr. 21, 1917.

A public utility wholesale natural gas company with oil "prospects."

FAULKNER, J. L. *Western Power Company.* Invest. Wkly., Apr. 14, 1917.

Account of a well-known public service "pyramid." Interesting and valuable statistics. Neglects to point out the weakness of company's securities by reason of underlying bonds on important parts distributing system.

GIBSON, T. *Railroad stock market.* Invest. Wkly., June 16, 1917.

Author's summary of "bargains." Not as critical of general conditions as this writer's articles usually are.

HICKERNELL. *English panics, 1895-1914*. Invest. Wkly., May 26, 1917.

Short but clear account. Diagram of European loanable funds instructive. Author should have given sources of his statistics.

MCGRATH, T. S. *Timber investments*. Invest. Wkly., May 26, 1917.

A one-sided account. Neglects difficulty in quickly liquidating on both timber lands and timber land bonds.

MORTON, A. V. *Safe investment of banking funds held by trust companies*. Trust Companies Mag., Apr., 1917.

Summary of possible channels of investments. Wisely insists on fluidity of paper bought with call deposits. Unfortunate to see writers recommend trust companies to enter underwriting syndicates under any conditions.

NEHF, H. W. *The concentration of water powers*. Journ. Pol. Econ., Oct., 1916.

Somewhat superficial account based largely on the Commissioner of Corporation's report of 1912. Suggest the great advantage of central concentrated ownership provided it does not jeopardize public interest.

PERKINS, C. H. "B. R. T."—*Third Avenue*. Invest. Wkly., May 12, 1917.

Study of two New York city traction companies. Prospects are not very encouraging.

PERKINS, C. H. *Crucible steel*. Invest. Wkly., Apr. 14, 1917.

Interesting statistical account of a "semi" unfortunate "war baby."

ROLLINS, M. *The telephone*. Invest. Wkly., Apr. 28, 1917.

A popular article.

ROSENTHAL, A. U. *Wabash Pittsburgh Terminal Railway prospects*. Invest. Wkly., Apr. 14, 1917.

Implies that because reorganization drastic, future assured. Difficult to see any future in this Gould blunder, and above review naïvely uncritical.

SELDEN, G. C. *Why industrials do not respond to earnings*. Invest. Wkly., May 5, 1917.

Public investors truly recognize the transitory character of present large earnings. Yet, transient as are present large earnings, the industrials are being put in a strong position as regards quick assets.

SELWYN-BROWN, A. *Public utility bonds as legal investments*. Invest. Wkly., Apr. 28, 1917.

Timely article emphasizing, as many think, that these bonds are among the strongest corporate obligations. Should be made legal by state laws for savings banks. Movement is certainly in this direction.

UPMANN, L. U. *Republic Iron and Steel*. Invest. Wkly. Apr. 21, 1917.

A small rather conservatively managed steel company. Instructive as showing condition of medium size steel unit.

"A STOCKHOLDER." *Depreciation of British home investments*. Econ. Journ., June, 1917.

Carefully prepared statistical tables. Most comprehensive brief

summary of subject yet prepared. Shows that "average" British railway common stocks have declined but little; British railway debentures most. British railway bonds, as whole, decline less than French.

Labor and Labor Organizations

(Abstracts by G. E. Barnett)

ADLER, H. M. *Unemployment and personality—a study of psychopathic cases.* Mental Hygiene, Jan., 1917. Pp. 9.

CLARK, L. D. *Recent Supreme Court decisions and the labor contract.* Mo. Rev. U. S. Bureau Labor Stat., May, 1917. Pp. 21.

Reviews the decisions in the Adamson eight-hour law case, the Oregon ten-hour law case, and the Oregon minimum wage case.

DEIBLER, F. S. *The Oregon minimum wage cases.* Am. Econ. Rev., Sept., 1917. Pp. 4.

FITCH, J. A. *Hours and output.* Survey, May 12, 1917. Pp. 2.

An illustration of the effect of shorter hours on output.

GLEASON, A. *The discovery. An account of a new way to industrial peace in Great Britain.* Survey, May 19, 1917. Pp. 3.

Illustrations of the spread of collective bargaining in England during the war.

HAMMOND, M. B. *The regulation of wages in New Zealand.* Quart. Journ. Econ., May, 1917. Pp. 43.

Analyzes the principles on which the court has acted in fixing minimum rates.

HOWARD, S. E. *The Fall River sliding scale experiment of 1905-1910.* Am. Econ. Rev., Sept., 1917. Pp. 22.

KAHN, M. H. *Report of the committee on industrial hygiene of the Retail Dry Goods Association.* Medical Rec., Nov., 1916. Pp. 10.

KELLY, R. W. *Hiring the worker.* Indus. Management, Apr., 1917. Pp. 16.

Application forms, interviews, medical examinations, and references.

MOWERY, H. W. *Cause and prevention of industrial casualty.* Indus. Management, May, 1917. Pp. 13.

Stresses the importance of slipping and tripping as factors in accidents.

NORTHCOTT, C. H. *Organization of labor for war.* Pol. Sci. Quart., June, 1917. Pp. 16.

Reviews the dealings of the English government with labor.

POWELL, T. R. *The Oregon minimum-wage cases.* Pol. Sci. Quart., June, 1917. Pp. 17.

Reviews the brief submitted on behalf of the state upholding the constitutionality of the law.

RATHBONE, E. *The remuneration of women's services.* Econ. Journ., Mar., 1917. Pp. 13.

If the state should take upon itself the cost of rearing children, the main reason for the difference in wages between the sexes would be removed.

SELEKMAN, B. M. *Nine years of the Canadian industrial disputes act.* Survey, Mar. 31, 1917. Pp. 8.

The act has been valuable as a means of promoting conciliation, but the compulsory features have not been effective.

British labor message to American workers. Am. Federationist, June, 1917. Pp. 12.

Addresses of the labor members of the British Commission before the Committee on Labor of the Council of National Defense.

The industrial disputes investigation act, 1907. Proceedings for the ten-year period 1907-1917, and for the fiscal year 1916-1917. Labour Gaz. (Ottawa), May, 1917. Pp. 17.

Minimum wage in Massachusetts. Mo. Rev. U. S. Bureau Labor Stat., May, 1917. Pp. 7.

Abstracts of recent reports of the Minimum Wage Commission of Massachusetts.

Operation of the minimum-wage law in the state of Washington. Mo. Bull. Bureau Labor Stat., Apr., 1917. Pp. 10.

Abstract of the second biennial report of the Industrial Welfare Commission of Oregon.

Protection of labor standards. Mo. Rev. U. S. Bureau Labor Stat., May, 1917. Pp. 15.

Recommendations of the Committee on Labor, Advisory Commission, Council of National Defense.

Stabilizing industrial employment. Ann. Am. Acad., May, 1917. Pp. 224.

Series of papers, chiefly by employers and employment managers, on methods of reducing labor turnover.

Money, Prices, Credit, and Banking

(Abstracts by Chester A. Phillips)

COURVITCH, P. P. *Gresham's law in foreign exchange.* Annalist, Apr. 23, 1917.

The dollar has become a function of the pound sterling and is therefore at a discount in neutral countries.

DEWAVRIN, M. *Les nouvelles lois sur le crédit aux petites entreprises.* Journ. des Econ., May, 1917. Pp. 13.

An analysis of the law of March 13, 1917, which provided for the establishment of coöperative banks and societies for small manufacturing and trading enterprises. The advance of funds in liberal amount and without interest to the new organizations by the Bank of France through the state is regarded as a feature of questionable expediency.

DJÖRUP, C. *Acceptances.* Bankers Mag., Apr., 1917. Pp. 4.

The nature and advantages of acceptances. The banker's risk where a trust receipt covers commodities subject to great fluctuation in price.

Bankers should be on guard against the assignment of invoices pertaining to goods secured by traders under trust receipt.

HOFFMANN, I. N. *Our loans to the allies and the future of gold investments.* Journ. Am. Bankers Assoc., May, 1917. Pp. 2.

England has been liberal in shipping gold to us for wholly selfish reasons, *i.e.*, in order to keep money rates low in this country. It would be unseemly for her to discontinue gold shipments now when the rate for her future borrowing here has been practically fixed.

LEWIS, G. *Vitalization of country's gold resources a problem for the reserve system.* Journ. Am. Bankers Assoc., May, 1917. Pp. 2.

Recommends counting gold in the hands of federal reserve agents as part of reserve held by the regional banks against notes issued. Considers that the mobilization of gold in circulation would also be desirable.

LIONBERGER, I. H. *Money and credit.* Banking Law Journ., Apr., 1917. Pp. 9.

The chief weakness of the federal reserve system is the false assurance which it holds out to bankers that they may recklessly lend out their resources during periods of prosperity and later rely on the assistance of the reserve banks in time of crisis. However, the system admits of a highly beneficial use. It should "put a bit in the mouth of enterprise and not a lash upon its back."

LORIA, A. *Il sistema monetario del cambio aureo.* Rif. Soc., Mar.-Apr., 1917. Pp. 32.

The situation of gold exchange in several countries, with a special study of Fisher's compensated dollar.

MARSH, A. R. *The insurance principle of average in its application to banking.* Econ. Wld., Apr. 28, 1917. Pp. 4.

A study of the law of average as applied mainly to individual saving and business insolvencies and partial failures.

OFFENHEIM, A. *Foreign exchange—an opportunity.* Investment Weekly, May 26, 1917. Pp. 4.

A diagrammatic exposition of the investment opportunities and disadvantages arising from the foreign exchange situation.

OREFFE, I. *L'assicurazione di credito.* Riv. di Sci. Bancaria, Oct.-Dec., 1916. Pp. 14.

Shortly after the war broke out England adopted certain novel measures for the safeguarding of credit, concerning the value of which a controversy has appeared in Italy.

PAGET, J. *The Gilbert lectures, 1917. Lectures II and III.* Journ. Inst. Bankers, Apr., 1917. Pp. 18.

Some legal aspects of such topics as cheques signed in blank, notice of dishonor, and time within which cheques must be presented.

RATTO, L. *La crisi dei cambi e il problema degli accordi interfederali di tariffa.* Riv. Intern., Mar., 1917. Pp. 26.

Written before the fall in exchange rates consequent upon entrance of the United States into the war.

ROVENSKY, J. E. *Readjustments in the world's finances made necessary by a shifting foundation of gold.* Econ. Wld., Apr. 7, 1917. Pp. 6.

The process by which England and France have financed the purchases of the allies in this country. The problem of regulating the outflow of gold at the close of the war.

SCHWEDTMAN, F. C. *Lending our financial machinery to Latin America.* Am. Pol. Sci. Rev., May, 1917. Pp. 13.

In a sound and aggressive South American trade campaign we must develop and correlate such factors as a prosperous merchant marine, a network of branch banks, investment agencies for placing American capital safely and advantageously, a trained personnel, and more means for personal contact with our South American neighbors.

SYKES, E. *Mr. Robert Benson on the "Quantity theory of money."* Journ. Inst. Bankers, May, 1917. Pp. 4.

"Mr. Benson is convicted out of his own mouth. It is not, he says, duplication of credit which raises prices, but increased demand. *But duplication of credit is the direct cause of increased demand.*"

TAUSSIG, F. W. *International trade under depreciated paper. A contribution to theory.* Quart. Journ. Econ., May, 1917. Pp. 24.

THRALLS, J. *Report of committee of twenty-five on the clearing and collection problem.* Journ. Am. Bankers Assoc., May, 1917. Pp. 25.

The committee is continuing its efforts to secure relief for banks in connection with the clearing and collection problem through an amendment to the federal reserve act. With reference to legislation the Federal Reserve Board would be neutral.

VAIDYARAMAN, G. A. *Indian currency and finance.* Wealth of India, Jan., 1917. Pp. 12.

India, due to the war, has become a creditor country. She has sent jute goods and hides to United States and cotton to Japan. For these exports payment has been made, not to India, but to England, in munitions and supplies. England, on account of the exigencies of the war, has cut off her main exports to India, railway materials, and other iron and steel manufactures. Under these conditions and in the absence of unrestricted gold exports from Great Britain the gold exchange standard of India is being tested decisively.

WESTERFIELD, R. B. *The reserves situation in the federal reserve system.* Am. Econ. Rev., Sept., 1917. Pp. 21.

WILLIS, H. P. *Kemmerer's "Modern Currency Reforms."* Quart. Journ. Econ., May, 1917. Pp. 7.

A critical analysis and appreciative summary. Directs attention to the timely importance of the volume when monetary and banking systems of belligerent countries are likely soon to be subjected to extensive revision.

WILLIS, H. P. *The Philippine national bank.* Journ. Pol. Econ., May, 1917. Pp. 32.

Banking conditions in the Philippines. The personnel and unique equipment of the bank; its policy and relations.

WILSON, F. R. *The federal farm loan board*. Case & Comment, June, 1917. Pp. 4.

The constitutionality of the federal farm loan act and an explanatory account of the main features of the system. A likely increase in the business of inspecting and preparing titles should appeal to the business sense of the legal profession. (Portrait illustrations.)

WITHERS, H. *The British money market after the war*. Econ. Wld., May 26, 1917. Pp. 5.

Conditional prophecies put forward without apprehension as to the position of London as the world's leading monetary center after the war.

Agricultural credit in Bosnia and Herzegovina. Intern. Rev. Agri. Econ., Feb. 1917. Pp. 11.

Canadian banking in 1916. Bankers' Mag. (London), May, 1917. Pp. 10.

An account of general expansion of operations.

A municipal savings bank. Canadian Munic. Journ., May, 1917. Pp. 3.

Account of the municipal savings bank of Birmingham, England.

The progress of banking in Great Britain and Ireland during 1916. Bankers' Mag. (London), May, 1917. Pp. 25.

With no change in the number of banks in Great Britain during 1916, a decline from 8.8 to 7 per cent in their ratio of capital and "reserve," i.e., surplus, to deposits and notes issued, the proportion of cash to deposits and note circulation witnessed an increase from 26 to 30 per cent. The increase in deposits during the same period was from £1,504,901,050 to £1,714,879,251.

Scotland and the Bank of England. Scottish Bankers Mag., Apr., 1917. Pp. 12.

The disabilities of Scotland arising from the practices employed by the Bank of England in the transfer of stocks and other property.

Les opérations de la Banque de France pendant l'année 1916. L'Econ. Franç., Apr. 14, 1917. Pp. 3.

Public Finance

(Abstracts by Charles P. Huse)

ADAMS, T. S. *The concentration of taxes upon wealth and business*. Bankers Mag., May, 1917. Pp. 6.

Describes trend of recent taxation in the United States and outlines plan for meeting war expenditures.

ADAMS, T. S. *Customary war finance*. New Republic, Apr. 7, 1917. Pp. 3.

Exemption of government bonds from taxation is bad from fiscal, political, and social points of view.

ADAMS, T. S. *Defects of the excess-profits tax law*. Annalist, June 4, 1917.

Recommends adoption of English plan by United States.

AMOROSO, L. *Il costo della guerra*. Giorn. d. Econ., Dec., 1916. Pp. 23.

ANDERSON, B. M. *Should wealth be conscripted*. Annalist, Apr. 16, 1917.

Assuming that the war will end within a year, the author recommends financing by loans rather than by taxes.

ARTAUD, A. *Péril national et richesse nationale (rapport de M. Adrien Artaud adopté par la Chambre de Commerce de Marseille)*. Monde Econ., Mar. 17. Pp. 7.

Concludes a survey of the alcohol industry in France with a plea for regulation but not suppression.

BASTABLE, C. F. *British financial organisation*. Econ. Journ., Mar., 1917. Pp. 5.

Reviews recent literature on the British financial system.

BLACK, H. C. *Sociological aspects of the income tax*. Case & Comment, Mar., 1917. Pp. 5.

Deplores the tendency in the United States to place the burden of public expenditures upon a few, and recommends lowering the exemption of the federal income tax.

BLAKEMORE, A. W. *The federal inheritance tax law of 1916*. Case & Comment, Mar., 1917. Pp. 4.

Outlines the law and points out various defects, such as the imposition of the tax on the entire estate rather than on shares of the beneficiaries.

BROWN, H. G. *The ethics of land-value taxation*. Journ. Pol. Econ., May, 1917. Pp. 29.

An interesting discussion of the justice of the single tax from various points of view.

BULLOCK, C. J. *Financing the war*. Quart. Journ. Econ., May, 1917. Pp. 23.

A review of the financial policies followed by the United States in former wars points to the advantage of relying to a considerable degree on taxation. The income and excess profits taxes, but not the inheritance, should be increased, rates on spirits, beer, and tobacco should be raised and tea and coffee taxed.

CHASE, H. S. *The budget amendment of the Maryland constitution*. Nat. Munic. Rev., May, 1917. Pp. 4.

A defense of the amendment by one of its authors.

DAVENPORT, H. J. *How war will curtail buying power*. Annalist, May 28, 1917. Pp. 2.

Estimates that American people must curtail their consumption by one quarter to finance the war.

ELLIOTT, S. B. *The taxation of timber lands in Pennsylvania*. Journ. Engineers' Soc. of Penn., Nov., Dec., 1916. Pp. 5.

FAIRCHILD, F. R. *The tax system of Connecticut*. Am. Econ. Rev., Sept., 1917. Pp. 4.

FROST, T. G. *Inequalities of the federal income tax*. Case & Comment, Mar., 1917. Pp. 3.

Finds defects in administration and recommends the exemption be lowered to \$1,000.

FULLER, O. B. *Taxation of mortgages and bonds*. Pro. Mich. State Tax Assoc., 1917. Pp. 12.

GRIZIOTTI, B. *La diversa pressione tributaria del prestito e dell'imposta*. Giorn. d. Econ., Mar., 1917. Pp. 36.

HARISTOX, J. *L'impôt sur le revenu*. Rev. Sci. Légis. Finan., Jan.-Mar., 1917. Pp. 52.

A critical account of the French income tax with much of the text of the tax law appended.

JÈZE, G. *Les finances de guerre de l'Angleterre: Les économies publiques*. Rev. Sci. Légis. Finan., Jan.-Mar., 1917. Pp. 34.

An account of the movement to secure economies in the British public service by such methods as reductions in the number of employees and restrictions on the loans of local governments.

KEMMERER, E. W. *Some highly undesirable effects of the exemption of government obligations from income taxation*. Econ. Wld., May 12, 1917. Pp. 2.

Exemption of United States bonds from income tax will induce the rich to buy them to escape supertaxes, and thus lose to the government the advantages of a popular loan.

LACHAPELLE, G. *Le 2^e emprunt de la défense nationale*. Rev. Pol. et Parl., Dec. 10, 1916.

MALLOY, W. M. *A real advance in state finance*. Case & Comment, Mar., 1917. Pp. 5.

Traces the course of events which led to the adoption of the constitutional amendment in Maryland reserving to the governor the right to originate appropriation bills.

MARSH, A. R. *Collateral effects of severe taxation of incomes and profits*. Econ. Wld., Apr. 21, 1917. Pp. 2.

A discussion of the repressive effects of heavy taxation with illustrations from English experience.

MARSII, A. R. *Some considerations in connection with war taxation*. Econ. Wld., Apr. 14, 1917. Pp. 2.

Emphasizes limits to war taxation.

MEILLET. *Le marché de l'emprunt national*. Le Monde Econ., May 19, 1917. Pp. 4.

Believes French government would gain by making market for its bonds free.

MORTON, R. L. *The Virginia state debt and internal improvements, 1820-1838*. Journ. Pol. Econ., Apr., 1917. Pp. 35.

An interesting account of the beginning of state aid after the Revolution, its very great increase in the thirties, unchecked by the panic of 1837, and the part played by sectionalism in the movement.

NOYES, A. D. *The war finance plans*. Bankers Mag., 1917. Pp. 6.

Discusses probable financial effects of American war loans.

PIGOU, A. C. *The economics of the war loan*. Econ. Journ., Mar., 1917. Pp. 10.

A clear and interesting exposition of the economic principles involved in the various methods of war financing.

PISTOLESE, S. *Credito pubblico e privato nella finanza di guerra inglese*. Riv. di Sci. Bancaria, Sept., 1916.

POWELL, F. W. *The problem of additional sources of city revenue*. Am. City, Jan., 1917. Pp. 3.

POWERS, L. G. *Popular control of governmental finances by executive budgets*. Case & Comment, Mar., 1917. Pp. 5.

Urges adoption of British budgetary system in the United States.

RAFFALOVICH, A. *Les finances allemandes*. L'Econ. Franç., May 12, 1917. Pp. 3.

A brief account of German methods of financing the war, including the regulation of foreign exchanges.

RAFFALOVICH, A. *L'emprunt britannique*. Journ. des Econ., Mar. 15, 1917. Pp. 7.

Describes the raising of the last British loan.

RICARD, P. L. *Les finances de guerre de l'Allemagne*. Rev. Pol. et Parl., Nov. 10, 1916.

SAWISTOWSKY, R. E. *How Davenport (Iowa) proportions paving-assessment benefits. Method devised to eliminate unfairness of the front-foot rule as a basis for computing taxes*. Engg. Rec., Mar. 10, 1917. Pp. 2.

SEIDMAN, F. E. *Effect of income on interest rates*. Annalist, June 4, 1917.

Believes that high rates imposed on large incomes by new revenue bill will increase the rate of interest.

SPRAGUE, O. M. W. *The conscription of income*. Econ. Journ., Mar., 1917. Pp. 15.

Presents a strong plea for financing the war from taxes rather than loans.

STAMP, J. C. *Taxation of excess profits abroad*. Econ. Journ., Mar., 1917. Pp. 12.

A useful account of the origin and development of the excess profits tax in the various countries.

TAUSSIG, F. W. *The scope and work of the United States tariff commission*. Econ. Wld., June 9, 1917. Pp. 4.

Outlines powers of commission and work contemplated.

UCHIIKE, F., and others. *Japanese administration and finance*. Munic. Research, Mar., 1917. Pp. 72.

A collection of articles on Japanese financial administration, both central and local.

WAGEL, S. R. *War financing of the belligerent countries of Europe*. Journ. Am. Bankers Assoc., May, 1917. Pp. 4.

A brief statement of the methods by which England has met war expenditures and regulated the economic life of her people.

WILLIAMSON, C. C. *State budget reform*. Case & Comment, Mar., 1917. Pp. 5.

A critical survey of various state budgets.

WRIGHT, J. *Excess profits tax in Great Britain*. Journ. Account., June, 1917. Pp. 6.

A concise statement of the British excess profits tax.

China's new budget and the progress of Chinese governmental finance. Econ. Wld., Apr. 14, 1917. Pp. 2.

The new government has developed old forms of taxation, introduced new, and made progress in placing domestic loans.

The effects of exemption of railroads from special assessments. Minn. Municipalities, Apr., 1917. Pp. 3.

A federal license and commercial tax. Banking Law Journ., May, 1917. Pp. 3.

Suggests plan for federal tax on businesses and their gross sales.

The reform of the land tax from the point of view of agriculture and breeding. Intern. Rev. Agri. Econ., Feb., 1917. Pp. 9.

Describes recent reforms in Uruguay.

Subscription plans. Greater N. Y., June 4, 1917. Pp. 5.

Gives methods used by various business houses in aiding their employees to purchase liberty bonds.

War financing of France and Germany. Journ. Am. Bankers Assoc., June, 1917. Pp. 5.

A brief comparison of the methods of war financing employed by France and Germany.

Les emprunts de guerre de l'Allemagne. A propos du sixième emprunt. L'Econ. Franc., Mar. 24, 1917. Pp. 3.

Describes Germany's method of raising war loans.

La progression des dépenses publiques de guerre en Angleterre: discours de Mr. Bonar Law, 14 décembre 1916; 12 février 1917. Rev. Sci. Legis. Finan., Jan.-Mar., 1917. Pp. 14.

Gives two recent speeches of the chancellor of the exchequer.

Housing

(Abstracts by James Ford)

CLOSE, C. L. *The economic saving of human resources*. Sci. Mo., May, 1917.

Welfare work of the United States Steel Corporation including housing.

FORD, G. B. *City planning in war time*. Am. City, June, 1917. Pp. 4.

Especial reference to experience of France.

LEWIS, N. P. *The methods of financing city planning projects*. Nat. Munic. Rev., May, 1917.

Discusses bonds and special assessments.

SINSHEIMER, A. *Goodyear builds city for its workers; 1,500 persons comfortably housed in 300 homes—1,000 more homes planned—tire company's*

solution of a big present-day manufacturers' problem—making Goodyear Heights attractive. Automobile, Mar. 1, 1917. Pp. 3.

VEILLER, L. *Industrial housing.* Am. Architect, Jan. 17, 31, Feb. 7, March 7, 1917. Pp. 3, 3, 3, 3.

VEILLER, L. *Problem of housing industrial workers; duty of employer of labor to concern himself about conditions under which workmen live.* Record & Guide, Jan. 13, 1917. P. 1.

Insurance and Pensions

(Abstracts by Henry J. Harris)

ANDERSON, E. B. *Burglary and theft coverage.* Econ. Wld., Apr. 7, 1917. Pp. 3.
Description of various types of policies and risks covered.

BELLOM, M. *L'obligation en matière d'assurance maritime du risque de guerre.* L'Econ. Franç., May 12, 1917. Pp. 3.

It would be illogical and unscientific to extend the requirement of compulsory insurance of ships to the cargoes.

COX, R. L. *Recent developments in the life insurance field.* Sci. Mo., Apr., 1917. Pp. 6.

Incidental benefits, prevention of disease, etc.

FISK, E. L. *Life insurance and life conservation.* Sci. Mo., Apr., 1917. Pp. 13.
Importance of periodic health examination of policy holders.

FISKE, H. *Life insurance as the basis of social economy.* Sci. Mo., Apr., 1917. Pp. 7.

Work of the life companies in promoting the welfare of their policy holders.

GOTTSCALK, A. L. M. *Observations on the existing status of insurance in Brazil.* Econ. Wld., Apr. 14, 1917. Pp. 2.

Governments decrees and regulations for all forms of insurance.

HARRIS, G. K. *Rating schedules for fire insurance on the Pacific coast and elsewhere.* Econ. Wld., May 12, 1917. Pp. 3.

The Pacific coast states are, in general, following the practice of the Eastern states, but have not yet come to any uniformity of action in the use of schedules.

HOFFMAN, F. L. *Conclusions regarding the necessity and advisability of compulsory health insurance in the United States.* Econ. Wld., Apr. 28, 1917. Pp. 4.

No thoroughly qualified and impartial investigation of European social insurance systems has thus far been made for the purpose of considering the practical application of these systems to American conditions. There is also a lack of information concerning actual conditions in the United States.

HUEBNER, S. S. *Life insurance and the war.* Sci. Mo., Apr., 1917. Pp. 12.

Discusses financial effects of the war, extent of claims due to army mortality, use of policy restrictions upon military and naval service and the "after-war" effects on those who serve in armies.

MACADAM, G. *Do we want to pay the health insurance bill?* N. Y. Times Mag., Mar. 11, 1917. Pp. 2.

Plan proposed would give country a small return for large outlay.

McADOO, W. G. *Arrangements for insuring seamen against war risks.* Official Bulletin, June 20, 1917. P. 1.

Insurance of seamen on merchant vessels to be mandatory for voyages to Europe and Mediterranean, permissive to other parts. Rate to Europe is 75 cents per \$100 of policy.

MACLEAN, A. T. *War and life insurance.* Econ. Wld., May 5, 1917. Pp. 2.

Chief war problems are (1) depreciation in value of investments, (2) increased death claims, (3) withdrawal of cash and other values, and (4) increase in taxation.

MITTENHOUSE, E. E. *Thrift from the life insurance viewpoint.* Sci. Mo., Apr., 1917. Pp. 5.

WOODWARD, J. H. *Provision for expenses in workmen's compensation premiums.* Econ. Wld., June 2, 1917. Pp. 3.

Formula for a system of loading based on the thesis that a constant charge per policy yields better results than a minimum premium and is more susceptible of theoretical justification.

Compulsory health insurance proposed by Social Insurance Commission of California. Mo. Bull. Bureau Labor Stat., Apr., 1917. Pp. 11.

Digest of the report of the commission.

The health insurance amendment. Trans. Commonwealth Club of Calif., June, 1917. Pp. 55.

Arguments for and against the proposed state constitutional amendment authorizing the enactment of a health insurance law.

Human losses in the war. Bull. of the War Study Society of Copenhagen, Aug., 1916. Pp. 32.

An attempt to estimate the direct losses of men sustained by the armies during the first two years of the war. The summary table in the introduction gives: dead 4,631,500; wounded 11,245,300; invalids 3,373,700. Writer gives careful references to his sources.

Marine insurance: books and pamphlets in the library of the Insurance Society of New York. News Letter, Mar., 1917. Pp. 2.

Titles of about 60 important works.

National insurance acts. The departmental committee's further and final reports. Journ. Inst. Actuaries, Apr., 1917. Pp. 11.

The two reports of this committee (Cd. 8396 and Cd. 8451) contain proposals for the fundamental reconstruction of certain small but important parts of the British health insurance structure. The treatment of cases of venereal disease and of causes of tubercular disease call for modification of the present practice of the approved societies.

Some objections to compulsory health insurance. Mo. Bull. Bureau Labor Stat., Apr., 1917. Pp. 6.

Digest of a number of pamphlets containing objections to the bill

for compulsory health insurance drafted by the American Association for Labor Legislation.

State hail insurance in North Dakota. Intern. Rev. Agri. Econ., Feb., 1917. Pp. 9.

Review of the last two reports of the state hail insurance commissioner.

Pauperism and Charities

(Abstracts by F. D. Watson)

BOYLAN, M. *Methods of charity in Bridgeport.* Catholic Charities Rev., Apr., 1917.

Describes the work of the Catholic Charitable Bureau of Bridgeport under the divisions of relief, rehabilitation, and prevention.

BELLOM, M. *Les sociétés de secours mutuels en temps de guerre: la guerre en 1914.* L'Econ. Franç., Mar. 17, 1917.

An account of the activities of the societies of mutual aid of France in the present war wherein is shown how little their work has been hampered by existing hostilities.

BRIGGS, R. *The associated Catholic charities of Baltimore.* Catholic Charities Rev., Apr., 1917.

A brief description of the work of some fifteen Catholic social agencies in Baltimore.

DARWIN, J. L. *Distress amongst the professional classes.* Charity Organ. Rev., May, 1917.

An account of the experiences of the author in connection with the Professional Classes War Relief Council of England of which he is chairman. The council aims to find employment for those of the professional classes thrown out of employment by the war or to aid in other ways.

NOTES

A special meeting of the Executive Committee of the American Economic Association was held in New York on June 2, 1917. At the request of President Commons it was voted to hold the coming annual meeting in Philadelphia, instead of Rochester, which had been the original choice.

At this meeting discussion was given to the advisability of the organized coöperation of economists in the work of the war. A proposal to constitute a number of committees to investigate and report upon some of the principal economic problems of the war received an adverse vote. The opinion of the majority was that such a step might possibly result in the unnecessary duplication of work already being done by other agencies, and that it would be contrary to the traditions of the Association and, in particular, to the provision of our constitution that "the Association as such will take no partisan attitude, nor will it commit its members to any position on practical economic questions." It was agreed, however, that the Association might advisably do what it could to aid the government in securing the services of economic experts and to inform such economists as desire to enter the national service with respect to the particular employments in which they might be most useful. For the purpose of furthering these ends, a special committee was appointed, with headquarters in Washington, consisting of F. W. Taussig (chairman), G. E. Barnett, and the Secretary of the Association.

In accordance with this purpose the Executive Committee of the Association has made an arrangement with the United States Civil Service Commission at Washington by which the special committee mentioned above will coöperate with the Civil Service Commission in the registration of economic experts for governmental service. The Civil Service Commission has accordingly distributed to members of the Association a return registration blank in which members are requested to state their special fields of interest, their professional equipment and for what duration they could accept appointment in case of urgent governmental need.

Since May 1, 1917, the following names have been added to the membership of the American Economic Association:

Barber, William A., 32 Waverly Place, New York City

Bauman, John, Eau Claire, Wis.

Baxter, A. J., 71 Broadway, New York City

Bodell, J. J., 453 Hope St., Providence, R. I.

- Boyle, O. A., Wichita, Kansas
Brecher, G. A., 451 West Ontario St., Chicago, Ill.
Brown, Guy M., Fayette City National Bank, Fayette City, Pa.
Bush, W. T., Columbia University, New York City
Callender, A. A., 425 West 114th St., New York City
Campbell, J. A., 539 Pender St., West, Vancouver, B. C.
Cavan, Howard, Elwood, Indiana
Chapman, Philip F., 185 Middle St., Portland, Maine
Colman, Howard D., care of Barber-Colman Co., Rockford, Ill.
Collings, Harry T., 308 S. Burrows St., State College, Pa.
Cook, George E., 30 East 34th St., New York City
Den, A., Room 1640 Woolworth Bldg., New York City
Duffus, William M., University of Kansas, Lawrence, Kansas
Goodman, J. F., Keith & Perry Bldg., Kansas City, Mo.
Graham, G. E., Elm & Market Sts., Dallas, Texas
Hall, C. W., 121 N. Oak St., Centralia, Ill.
Hauserman, E. F., 1729 East 22d St., Cleveland, Ohio
Hodgson, Caspar W., 313 Park Hill Ave., Yonkers, N. Y.
Howell, C. F., 175 West Jackson Blvd., Chicago, Ill.
Hunkins, Carl B., Billings, Montana
Jackson, J. Hugh, University of Oregon, Eugene, Oregon
Keeney, C. H., P. O. Box 846, Hartford, Conn.
Keller, Frederick A., 405 N. Second St., Camden, N. J.
Kenmerer, A. E., 1269 East 125th St., Cleveland, Ohio
Kryshtofovich, Theo., Poste Restante, Petrograd, Russia
Ladish, H. W., The Ladish-Stoppenbach Co., Milwaukee, Wis.
Lewis, David J., U. S. Tariff Commission, Washington, D. C.
Lewis, James G., Forbes & Stevens Sts., Pittsburgh, Pa.
McCubbin, T. P., 314 Market St., Harrisburg, Pa.
Marsh, R. K., 2271 Clermont St., Denver, Colorado
Mittelman, E. B., 658 East 51st St., Chicago, Ill.
Morris, Bernard, 2082 West 16th St., Wilmington, Del.
Murbach, Ralph, Elyria, Ohio
Orr, Robert K., Michigan Employers Casualty Co., Lansing Mich.
Parker, Frank, University of Pennsylvania, Philadelphia, Pa.
Phillips, Osmund, 2316 Avenue J., Brooklyn, N. Y.
Powell, Elias, 615 State St., Madison, Wis.
Power, Ralph L., 525 Boylston St., Boston, Mass.
Ramsay, Andrew, Mount Savage, Maryland
Richmond, Stacy, 59 Cedar St., New York City
Rosebush, Judson G., Appleton, Wis.
Ruhl, G. A., Palquemine, La.
Ross, P. H. W., National Marine League, 18 Old Slip, New York City
Sakamoto, Y., Satobu Surugacho, Nihonbashi, Tokyo, Japan
Schulderberg, W. F., Bank St., Baltimore, Md.
Scovell, T. H., 681 Olive St., Shreveport, La.
Seligman, A. R., 555 Park Ave., New York City
Sorenson, A. W., 487 A. First St., San Jose, California
Sullivan, Robert J., 1337 Park St., West Hartford, Conn.

Tenny, John, Jr., Howe Rubber Co., New Brunswick, N. J.
Tanenbaum, Jerome, 640 Broadway, New York City
Wehrwein, George S., University of Texas, Austin, Texas
Whaling, H. B., University of North Dakota, University, N. Dak.
White, Alexander M., 423 West 118th St., New York City
White, Edwin, 93 East 4th St., St. Paul, Minn.
Wilson, Alexander M., 423 West 118th St., New York City
Woodward, Joseph H., 230 Fifth Ave., New York City
Youngholm, A., 40 Second St., San Francisco, California

A new Division of War Trade Statistics has been established in the federal Bureau of Foreign and Domestic Commerce. A number of economists and statisticians are employed in the work of the new division, some of them for the summer and some for a longer period. The list includes W. M. Adriance, John L. Coulter, Wilfred Eldred, Grover G. Huebner, Lincoln Hutchinson, Emory R. Johnson, Kemper Simpson, Guy E. Snider, A. B. Wolfe, and Allyn A. Young. Professor Young has been appointed chief of the division.

A voluntary and unofficial organization known as the National Board for Historical Service, with headquarters at Washington, has been established for the purpose of organizing the services of historical workers of the United States. This board is composed of the following persons: Victor S. Clark, Robert D. W. Connor, Carl R. Fish, Charles D. Hazen, Charles H. Hull, Gaillard Hunt, Waldo G. Leland, James T. Shotwell, and Frederick J. Turner. The address of the secretary, Mr. Leland, is 133 Woodward Building, Washington, D. C.

Professor Simon N. Patten was this spring retired from the faculty of the University of Pennsylvania on account of the age limit. Four members of the faculty reached the retiring age at the same time. The three others were continued as Professors Emeritus. The faculty of the Wharton School unanimously voted a request to the board of trustees that Dr. Patten should be continued on the faculty, but this was not acceded to.

Professor W. Z. Ripley is preparing a part of the final report of the Federal Eight Hour Commission, and in connection therewith has made observation trips, testing different branches of the service in the West and elsewhere. His report will deal with the status and development of the trainmen's schedules and agreements under which the Adamson law has to be applied.

Professor A. N. Holcombe, of Harvard University, is engaged with the United States Bureau of Efficiency in making a survey of the

executive departments and independent establishments with a view to the discovery of the duplication of statistical and other work.

Dr. N. I. Stone is making a study of the income tax in its statistical and administrative aspects for the Institute of Government Research, Washington, D. C.

Mr. Edward A. Brand has resigned temporarily as one of the assistant chiefs of the Bureau of Foreign and Domestic Commerce in order to make a study of trade conditions in South America, in the capacity of special trade commissioner. In his stead Mr. B. S. Cutler has been appointed; and as successor to Dr. Rutter, who is now commercial attaché at Tokyo, Mr. Chauncey D. Snow has been appointed.

Mr. Henry Bruère, former city chamberlain of New York, is serving on a commission to bring about an administrative reorganization of Mexican finance.

Dr. I. M. Rubinow has been appointed director of the Bureau of Social Statistics of the Department of Public Charities of the City of New York. This bureau has been established by Commissioner Kingsbury for the study of the problem of dependency and destitution in New York City, and of the efficacy of the methods of the department in dealing with these problems.

Professor Carroll W. Doten, of the Massachusetts Institute of Technology, has been appointed on the new State Immigration Board created by the last legislature. This board is to assist immigrants upon their arrival in Massachusetts and to endeavor to Americanize aliens and acquaint them with American ideas and customs.

Ralph C. Whitnack, professor of economics at Keio University, Tokyo, Japan, sometime Austin Fellow at Harvard University, has resigned to accept a reappointment as Secretary of Council and Economic Adviser to His Highness the Maharajah Gackwar of Baroda. The government of India has given its sanction to the appointment, and Mr. Whitnack will take up his new responsibilities in September. During a previous incumbency of the office of Economic Adviser at Baroda, Mr. Whitnack was instrumental in establishing the Bank of Baroda, Ltd., in abolishing harassing frontier tariffs, and in promoting industries with an aggregate capitalization of \$1,400,000. In addition to his other duties he will lecture at the Baroda College (a branch of Bombay University) on Japanese economic policies.

A joint conference of the Western Economic Society and the City

Club was held in Chicago, June 21-22, 1917, to consider the subject of "Financial mobilization for war." The following papers were discussed: "The financial requirements of the situation," by Professor E. R. A. Seligman; "Bonds or taxes, in what proportion," by Professor E. Dana Durand; "Industrial conscription," by Professor Harold G. Moulton; "Lessons from our past," by Professor Ernest L. Bogart; "Lessons from English taxation in the present war," by Professor Carl C. Plehn; "Taxation and business," by Mr. Lucius Teter; "Income and excess profits taxes," by Professor T. S. Adams; "Bond issues and the money market," by Professor William A. Scott; and "Federal reserve banks and war finance," by Mr. A. C. Miller.

The School of Commerce of the University of Nebraska is offering evening classes for business men in the city of Lincoln.

Among the courses recently offered in the Summer School of Arts and Sciences at Harvard University was one by Professor James Ford on the principles and methods of war relief.

A circular announcing available subjects for essays in the Hart Schaffner & Marx prize competition for 1918 may be had of Professor J. Laurence Laughlin, University of Chicago.

Many readers of the REVIEW may be interested in a *Special Bulletin* published by the Chamber of Commerce of the United States of America (Riggs Bldg., Washington, D. C.). The issues are prepared by the Committee on Statistics and Standards, of which Mr. A. W. Douglas of St. Louis is chairman, and make reports on the condition of crops.

A bulletin of the Russell Sage Foundation Library for June, 1917, contains several pages descriptive of the library collections in New York City of interest to social workers (pp. 33-42).

Dr. John Franklin Crowell, who recently retired from the Executive Office of the New York Chamber of Commerce, is engaged in the preparation of a volume on the *Internal Commerce of the United States*.

Dr. Frank G. Stockton, of the University of Indiana, is conducting an investigation of retail and wholesale public markets, coöperative delivery systems, and municipal trading, the results of which will soon be published in bulletin form.

The Eleventh Annual Report of the President and of the Treasurer of the Carnegie Foundation for Teaching, 1916 (576 Fifth Ave., New

York, pp. 172) is devoted to further discussion of the subject of insurance and annuities for teachers and contains the replies of the associated institutions to the proposals made by the Carnegie Institution during the previous year.

Mr. Napoleon Wagner (1101 Emerson St., Denver, Colorado) will be glad to furnish gratis to the members of the American Economic Association copies of his pamphlets on taxation. The titles are as follows: *The Plan of Utility, Based on Intrinsic Gold Value* (pp. 26); *The Plan of Utility versus the Somers System of Taxation* (pp. 44).

The Fabian Research Department (25 Tothill St., Westminster, London, S. W.) is making an inquiry into the present position of trade unionism and its development during the last twenty-five years.

The Department of Commerce has issued the fifteenth edition of the *List of Publications of the Department of Commerce Available for Distribution* (Washington, May 8, 1917, pp. 77).

The Library of Congress has prepared a pamphlet on *The United States at War: Organizations and Literature* (pp. 115), compiled under the direction of Herman H. B. Meyer. This contains a list of several voluntary organizations which have been brought into existence in order to assist the government in the present emergency and adds brief descriptive notes in regard to the activities of these organizations. Many bibliographical references are included.

B. F. Bowen and Company (711 Occidental Building, Indianapolis) announce a compilation and publication of *Important Federal Laws* (price, \$6), prepared by John A. Lapp, director of the Indiana Bureau of Legislative Information. Among the acts included are: the Federal Reserve Act, Farm Loan Act, National Banking Act, Interstate Commerce Act, Anti-trust Act, Warehouse Act, Cotton Futures Act, Income Tax, Corporation Tax, Inheritance Tax, Tariff Law, Child Labor Law, Employers' Liability Acts, and Eight-Hour Law.

Houghton Mifflin Company announce *The Theory and Practice of Scientific Management*, by C. Bertrand Thompson, price \$1.75.

The Macmillan Company announces the following books: *The Foundations of National Prosperity: Studies in the Conservation of Permanent National Resources*, by Professors R. T. Ely, R. H. Hess, C. K. Leith, and T. N. Carver; *The Food Problem*, by Vernon L. Kellogg, in Our National Problems Series; *History of Labor in the United States*, by Professor Commons with the following collaborators, John B. An-

draws, Helen L. Sumner, H. E. Hoagland, Selig Perlman, David J. Saposs, E. B. Mittelman, and an introduction by Professor Henry W. Farnam.

Longmans, Green & Co. announce a new edition of *English Farming, Past and Present*, by Rowland E. Prothero, president of the Board of Agriculture of Great Britain. The first edition of this book was published in 1912.

Since the preparation of the lists of new books the following have been received:

Longmans, Green: *Economic and Social History of Chowan County, North Carolina, 1880-1915*, by W. Scott Boyce; *Collective Bargaining in the Lithographic Industry*, by H. E. Hoagland; *Separation of State and Local Revenues in the United States*, by Mabel Newcomer.

Macmillan: *The Value of Money*, by B. M. Anderson; *Workmen's Compensation*, by J. E. Rhodes, 2d.

Houghton Mifflin: *Introduction to Rural Sociology*, by Paul L. Vogt.

Filson Club: *The Kentucky River Navigation*, by Mary Verhoeff.

Putnams: *The Margin of Happiness*, by Thetta Quay Franks.

Harvard University Press: *Business Statistics*, by Melvin T. Copeland; *Municipal Ownership*, by Carl D. Thompson.

Alexander Hamilton Institute: *The Exchanges and Speculation*, by Albert W. Atwood; *Investment*, by E. D. Jones; *Cost Finding*, by D. S. Kimball; *Domestic and Foreign Exchange*, by E. L. Stewart Patterson.

The American Association for Labor Legislation has issued two numbers (April and June) of a Special Bulletin on *Labor Laws in War Time*. In No. 1 appears in full the public announcement of the executive committee issued March 23, when war appeared imminent, outlining the essential minimum requirements that should be maintained for the protection of those who serve the industries in this emergency, in order to increase production and to conserve human resources. No. 2 reports encouraging gains in the campaign to uphold existing labor standards, and suggests further measures necessary for adequate and proper mobilization of the industrial army.

In the July issue of *Equity* (1520 Chestnut St., Philadelphia, p. 129) are given the results of a referendum vote among the economists and sociologists of the country as to the best method of financing the war. Of the 1017 replies received, 853 voted in favor of making large incomes largely responsible for meeting the expenses of the war; 164

voted positively against the principle of conscription of income for war finance. For income conscription exclusively there were 415; and against, 562. Taxation of incomes of \$1,000 was favored by 605.

Readers of the REVIEW may be interested in *The Industrial News Survey*, a weekly published by the National Industrial Conference Board, which is composed of sixteen national associations of employers in the United States. This weekly condenses in a precise and accurate form the principal items of news affecting industry. Persons wishing sample copies are advised to write to Mr. Magnus W. Alexander, executive secretary, 15 Beacon St., Boston.

The Virginia State Negro Business League has begun the publication of a semi-annual *Bulletin* devoted to the negro's potential importance in business (711 Highland Ave., Norfolk, Va.).

The last number of the *Bulletin of the International Labour Office* (Vol. XI, Nos. 3-5), delayed by war conditions, has just been distributed in America by the American Association for Labor Legislation.

The July issue of the *Bankers' Magazine* (London) contains a letter of congratulation to Sir Inglis Palgrave upon his ninetieth birthday, signed by the leading economists of England.

The *Gazette de Lausanne* for July 9, 1917, contains an account of the ceremonies held to celebrate Professor Vilfredo Pareto's completion of twenty-five years of distinguished service as professor of political economy in the faculty of law of the University of Lausanne. A number of universities in other countries sent representatives, including Professors M. Pantaleoni, of Rome; Emile Bouvier, of Lyons; and Charles Gide, of Paris. Representatives were also present from the universities of Grenoble, Bordeaux, and Montpellier.

Appointments and Resignations

Professor Walter M. Adriaance has been granted leave of absence from Princeton University for the first half of the coming year and will be engaged in statistical work in Washington.

Professor W. G. Beach has resigned his position as head of the department of sociology at the University of Washington, Seattle, to become dean of the School of Liberal Arts and head of the department of economics and history at Washington State College, Pullman.

Dr. Abraham Berglund has been promoted to the rank of associate professor of economics at the University of Washington, Seattle.

Mr. Ralph H. Blanchard has been appointed instructor in economics and insurance in the School of Business at Columbia University.

Mr. Bruce Bliven, formerly head of the department of journalism in the University of Southern California, has been appointed lecturer on retail advertising at the New York University School of Commerce, Accounts, and Finance.

Dr. Harriet Bradley has been appointed assistant professor of economics in Vassar College.

Professor H. A. E. Chandler has been acting as expert advisor to the government of Mexico in tax reform.

Dr. Frederick A. Cleveland has resigned his position as director of the New York Bureau of Municipal Research and has taken an executive position with the Industrial Service and Equipment Company, which serves as a central staff to the corporations owned by the Willett-Sears Company. Mr. Cleveland will have his residence in Boston.

Dr. Wilson Compton, formerly instructor in economics at Dartmouth College, is now with the Federal Trade Commission and is in charge of the investigations of the lumber and oil industries.

Mr. Paul D. Converse, instructor in commerce at the School of Economics of the University of Pittsburgh, has been granted a year's leave of absence.

Professor Melvin T. Copeland, of Harvard University, is serving as secretary of the Commercial Economy Board of the Council of National Defense at Washington.

Mr. John L. Dohr has been appointed instructor in accounting in the School of Business at Columbia University.

Assistant Professor W. W. Douglas has been made professor of accounting at the New York University School of Commerce, Accounts, and Finance.

Professor Charles A. Ellwood, of the University of Missouri, has been teaching sociology at the summer session of the University of Colorado.

Mr. J. Anderson Fitzgerald has been promoted from assistant professor to associate professor of commerce in the College of Commerce of Toledo University. During the summer he served as statistician of the city division of health of Toledo.

Mr. L. G. Foster, has been appointed field agent in marketing at Ames, Iowa, in coöperation with the Office of Markets and Rural Organization at Washington.

Professor W. F. Gephart, of Washington University, has resigned his position as special expert in the Office of Markets at Washington in order to undertake a study for the Carnegie Foundation on the effect of war on insurance.

Dr. R. C. Haig has been acting as expert advisor to the government of Saskatchewan in tax reform for the summer of 1917.

Mr. Hudson B. Hastings, professor of applied economics at Reed College, has been teaching in the summer school of the University of California.

Mr. F. C. Henderschott, manager of the New York Edison Company, has been appointed lecturer on corporation schools at the New York University School of Commerce, Accounts, and Finance. He will offer a course the purpose of which is to train executives for educational work in corporations.

Professor G. B. Hendricks, formerly head of the finance and banking department of the Utah Agricultural College, has been appointed director of the School of Commerce and Business Administration at the Utah Agricultural College.

Dr. A. N. Holcombe, absent on leave from Harvard University, has been appointed associate professor of political science at Leland Stanford Junior University for one year.

Dr. Stanley E. Howard, of Princeton University, has been appointed instructor in economics at Dartmouth College.

Professor A. S. Johnson has leave of absence for the year from Leland Stanford Junior University and continues his work on *The New Republic*.

Dr. Eliot Jones, formerly of the University of Texas and now examiner in the Federal Trade Commission, has been appointed associate professor of economics in Leland Stanford Junior University.

Mr. John S. Kier, of the Wharton School at the University of Pennsylvania, will take the place of Mr. Paul D. Converse as instructor in commerce at the School of Economics of the University of Pittsburgh for the year.

Mr. Lewis Lilly has been appointed assistant professor of accounting and finance at the University of Washington.

Assistant Professor John T. Madden has been made full professor of accounting and head of the department of accounting at the New York University School of Commerce, Accounts, and Finance.

Mr. Thomas A. Mason, has been granted a year's leave of absence from the department of sociology at the University of Washington, Seattle, and will spend the year in study at New York City.

Assistant Professor Stephen I. Miller, Jr., of Leland Stanford Junior University, has been appointed professor of transportation in the University of Washington. During the summer, Professor Miller has given courses in the University of California.

Dr. Mabel Newcomer has been appointed instructor in economics in Vassar College.

Mr. William Fielding Ogburn, formerly professor of sociology and economics at Reed College, has been appointed professor of sociology and head of the department of sociology at the University of Washington, Seattle. Dr. Ogburn gave courses in sociology at the summer session of the University of Washington.

Mr. Carlton H. Parker, who has been assistant professor of economics at the University of California, has been appointed head of the department of economics and commerce and dean of the School of Commerce at the University of Washington, Seattle.

Dr. Edward E. Pratt has resigned his position as chief of the Bureau of Foreign and Domestic Commerce.

Mr. Jesse H. Riddle has been appointed instructor in economics at Dartmouth College.

Mr. Charles F. Rittenhouse, who has been associate professor of accounting at Simmons College, has been appointed professor of accounting and head of the accounting department of the College of Business Administration of Boston University.

Dr. Frank R. Rutter has been appointed commercial attaché at Tokyo, Japan.

Mr. J. M. Shortliffe, instructor in economics at Dartmouth College, has been promoted to an assistant professorship.

Professor G. A. Stephens, of the University of Nebraska, has received leave of absence in order that he may take part in the food investigation being conducted by the Federal Trade Commission.

Dr. George Thomas, formerly director of the School of Commerce

and Business Administration of the Utah Agricultural College, has been appointed treasurer of the Federal Land Bank at Berkeley, California.

Mr. Rex Tugwell, of the University of Pennsylvania, has been appointed assistant professor of marketing at the University of Washington.

Dr. Francis Tyson, assistant professor of sociology at the School of Economics, University of Pittsburgh, has been made professor of social economy. Dr. Tyson lectured in the summer school of the University of Minnesota.

Dr. T. W. Van Metre has been promoted to an assistant professorship in economics and transportation in the School of Business at Columbia University.

Mr. Leslie Vickers has been appointed an instructor in economics at Columbia University.

Miss Sydnor H. Walker has been appointed assistant in economics at Vassar College.

Professor L. D. H. Weld has resigned his position as professor of business administration at the Sheffield Scientific School, Yale University, to become manager of a new department of commercial research for Swift and Company, Chicago.

Professor John R. Wildman, who was head of the department of accounting at the New York University School of Commerce, Accounts, and Finance, has given up his administrative work in order that he may devote more time to teaching and research.

Mr. A. W. Wright has been promoted from assistant professor to associate professor of political science in the School of Economics, University of Pittsburgh.

The American Economic Review

VOL. VII

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No. 4

THE LAW OF BALANCED RETURN

There is a striking unanimity among economists that the law of diminishing returns has vitality in the economic theory of the present time. Many principles of explanation raised to the dignity of law by the school of classical economists are undergoing constantly searching analysis, with regard to both their fundamental import and their application to the conditions of twentieth century production and distribution. Nevertheless, there seems to be a consensus of opinion that this law retains an important place both as an abstract principle of deduction and as an effective working hypothesis for interpreting facts. Yet, on the other hand, there is no such unanimity regarding the rigor with which the principle may be applied to modern industry. And this somewhat pragmatic test of the law's present worth is the only test that can now concern us. That it was an effective principle to explain production under the agrarian conditions of early nineteenth century England does not prove, necessarily, that it is equally effective under the highly organized industrial conditions of the twentieth century. That, indeed, the law in the form that it has been passed down to us must seem both inadequate and obsolete would appear from the difficulties experienced in bringing it into accord with modern conditions. Its inadequacy and obsolescence will appear from an analysis of the necessary presuppositions of the traditional form of the law.

These presuppositions are as follows:

1. Economic production results from the coöperation of elements or factors essentially different from each other.

2. The factors and the products may both be reduced to quantitative terms.

3. The proportions of the factors that coöperate in bringing about the product may be varied.

4. The quantities to which both factors and products may be reduced can be related by direct numerical ratios; in other words, the quantities of factors and products are commensurable and may be compared with each other in terms of some quantitative common denominator.

The first of these involves the fact that at least some of the factors which the economist considers essential to production are fundamentally different. It is not the present purpose to discuss whether or not the four well-known elements assumed by the classical economists may be reduced in number. It is sufficient to point out that if reduced to nature and labor, material and man, in the terms of which we are accustomed to describe primitive industry, these two are absolutely and irreducibly different from each other. This difference is always assumed as a postulate by even the most critical students of economic theory and its further criticism would carry us into the range of metaphysics.

The second presupposition stated above must be assumed if the principle of diminishing returns is to be objectified into a law. It involves the fact that nature, labor, capital, and the resulting products can each be reduced to quantitative terms—so much land, so much labor, so much capital, and so much product. Each must be expressed in terms of quantity. It need not be, necessarily, acres, days, dollars, and bushels, but it must be a definite quantity of land acted upon by a definite quantity of labor and a definite quantity of capital and producing a definite quantity of product. Otherwise, there is no law of diminishing returns because there is no common denominator by which different conditions of production may be compared.

The third presupposition involves the fact that the quantity of the separate factors that coöperate in producing a given product may be varied at will. It implies that there is no fixed quantity of natural resource or of labor or of capital that must be used in any given combination. Granted the necessity that economic product can arise only through the coexistence of at least two different factors (our first presupposition) it follows that there is an irreducible minimum for each factor. There must be at least some labor, some of a natural resource; but above this lower limit the quantity of labor and the quantity of the natural resource may be varied at will. In other words, economic production is not dependent on definite proportions of the factors. Or, expressing this in negative terms, an economic product is not analogous to a chemical product which has its composition determined by a definite proportion of the factors.

The fourth presupposition implies that quantities of the factors and of the products may be compared; likewise the products of different combinations of factors. Otherwise the quantities of the

two, factors and product, are incommensurable with each other and cannot, therefore, be related. Thus when we speak of doubling the labor factor we must imply that some quantitative equivalent of labor is just twice as great in the one case as in the other. We imply that the economic value of different labors may be reduced to such quantitative terms that their values may be compared directly with each other in terms of a simple numerical ratio—twice, a half, three times. Similarly, when we say that the product is not twice as great we imply that the two products may be reduced to a common denominator of economic quantity and as such compared. The law of diminishing returns says nothing concerning variations in quality nor measures of intensive value; it is essentially and primarily a one dimensional law, presupposing perfect commensurability of the quantitative equivalents for economic values. This presupposition changes the law of diminishing returns from a regulative principle into one capable of empirical verification according to the logical test of concomitant variation. We can vary the quantity of labor applied to a given piece of land or piece of machinery and note the effect on the quantity of the product. We have to assume that one of the factors remains constant while the other factor or factors vary; but this is no more of an assumption than that taken in the physical sciences where a general principle is tested by a few crucial cases of concomitant variation.

From this summary of the presuppositions upon which the law rests, it is clear that in form, at least, it is a quantitative law. In fact it is one of the very few so-called laws of the social sciences which reflect the quantitative form generally regarded as the ideal of the natural sciences. But beyond this outward form it has been found well nigh impossible to reduce the principle of diminishing returns to quantitative terms. How much of a reduction in product will result from a given change in the quantity of the factors? This and similar questions cannot be answered because of the extreme difficulty in controlling the quantities of the factors throughout a series of experiments. Consequently, there has been no progress in our understanding of it beyond a vague indefinite statement long familiar in the textbooks.

The chief reason for this failure to recognize that the law of diminishing returns is in form quantitative, but incapable of direct empirical verification, is that we associated it with agricultural production. Historically, agricultural production was the

field in which economists worked out the law and it is still the field in which its application, merely as a general principle, is clearest to us all. Teachers and writers on economic subjects are still using it because of the simplicity and ease of illustration. But it is the field where progress beyond the merest qualitative verification is impossible because of the practical difficulty of controlling the conditions under which the law may be put to a practical test. Two pieces of land are never the same; soil, exposure, drainage, susceptibility to insect pests must be different even though the two pieces are adjoining fields. And if the same piece of land is cultivated under varying quantities of labor during successive years there is the uncontrolled and presumably different set of weather conditions. The most that can be said, therefore, is that the increase in the quantity of the product is not proportional to the increase in the quantity of the varying factor, the labor. But if the presuppositions underlying the law are true, it must be susceptible to a more rigorous statement than this. Without for a moment minimizing the importance of agriculture, one must recognize that modern industry includes much that is not agriculture. And the law of diminishing returns, if it is to retain its old-time vitality, either must be held within agriculture and extractive activities as its own restricted field or shown to have a genuine applicability to modern industry.

Many facts connected with present-day manufacture indicate conditions which might be associated with the law of diminishing returns, were it possible to phrase it differently—were it possible to get a clearer idea of the meaning of quantity as it must be applied to the factors in industrial production. The presuppositions of the law require that labor and capital be compared, quantitatively, with each other and with the product under varying combinations. The difficulty is to do this empirically. But this difficulty is not nearly as unsurmountable in modern manufacturing as in agriculture and the other extractive industries. Economists have noted, especially within the last ten or fifteen years, that the economies of large-scale production, particularly when spread over many widely separated plants, have not been realized to anything like the extent that was anticipated. In some notorious instances they were not realized at all, the cost of the product being larger in large-scale than in small-scale production. This suggests the presumption that the law of diminishing returns, heretofore applied to those kinds of production in which a natural

resource is the constant factor and labor and capital the variables (like agriculture and mining), can be applied to manufacture if only varying quantities of the factors of production can be empirically studied in their effects on the quantity of production. To do this the problem then becomes a study of the effect of changes in the quantity of the factors upon the quantity of the product.

In isolating the factors, in order to test the effect on the product of varying their quantity, it is neither necessary nor illuminating to distinguish between that portion of the capital factor that is invested in land and that in structures and equipment. If the manufacturer had a certain amount of money to be invested in "plant account," it would rest merely with his construction engineer to determine how much should be expended in land and how much in structures and machinery. Very commonly a few hundred dollars of unimproved land gives sufficient area to erect a plant costing hundreds of thousands of dollars. Especially is this true if the establishment does not require land in or near a city. As soon as the land is acquired, its original cost is irretrievably merged with the cost of the foundations and the structures, the whole representing a fixed capital investment which, aside from depreciation on the one hand and improvements on the other, remains relatively constant for considerable periods of time. It is, indeed, the most constant factor of production that economic theory can isolate, far more constant than the land of the agriculturalist, which is always subject to differences in soil content and the varying conditions of weather. On the other hand, the labor factor can be subjected to direct and quantitative controls, impossible in the case of agricultural production. For it is certain that the economic value of agricultural labor varies with the seasons. The worth of a day's work at hoeing in early June is distinctly different from the same objective quantity in August—hoeing or anything else. But in manufacturing, on the other hand, the economic value of the same quantity of labor is more nearly constant whenever applied to the same equipment. Similarly, the proportion of economic values of varying quantities of manufacturing labor approximates the ratio of the quantities. One day's labor and two days' labor at a stitching machine are more easily compared with each other and their product than one and two days' labor on a farm.

Reduced, then, to the simplest terms and the terms most nearly

consonant with actual conditions, it appears that the product of a modern manufacturing establishment is the direct result of a relatively constant factor in the form of fixed capital investment and a variable factor in the form of human labor, the whole administered by an intangible economic value called entrepreneur ability—the rôle of which in the present discussion may be omitted for the moment. The immediate problem of the quantitative relations between factors and products in manufacturing—the problem of the application of the law of diminishing returns—is, then, the problem of the effect of variations in the quantity of equipment and the quantity of labor on the quantity of the manufactured goods. To subject this problem to specific empirical tests there would be two mutually related experiments or rather sets of observations. (1) Assume a constant quantity of labor (a constant labor cost); vary the quantity of fixed capital (the capital cost); and note the effect on the quantity of product. (2) Assume a constant quantity of fixed capital (a constant capital cost); vary the quantity of labor (the labor cost); and note the effect on the quantity of product. It is obviously impossible to isolate cases where the conditions may be controlled, as is often possible among the physical sciences; but there are groups of economic phenomena which so nearly approximate those just defined that the conclusions to be drawn from them are at least of tentative value.

The shoe industry affords numerous illustrations of varying costs of fixed capital under a constant of labor costs.¹ The following case is highly instructive. A certain man had had long training in the business. He had accumulated enough money to operate a small factory with rather antiquated and inefficient equipment. In this he was highly successful. Spurred on by his success he built a modern factory to manufacture the same grade of shoes. Indeed, so complete and perfect of its kind was the new factory that it was distinctly a "show establishment" among those making that particular grade of shoe. The output or quantity of product was very much greater than in the previous factory although the same scale of piecework wages prevailed. He failed, losing in a short space of time practically all that he had made

¹ The labor element in the shoe industry is easy to isolate and deal with, as the industry is conducted on a piece work basis now carefully systematized. The scales of payment are approximately equal in different localities for the same grades of labor.

under the previous conditions. He exercised the same entrepreneur ability in both factories. The labor costs per unit of product remained as constant as a set of actual conditions would permit. The fixed capital costs only varied. But in the second case they were so much greater proportionally to the cost of labor that the total cost of the product exceeded the competitive price value determined by other smaller and technically less efficient factories. In brief, the fixed capital cost was too great for that particular line of product.

And the manufacturers of the different grades of shoes illustrate varying quantities of products produced under conditions of varying quantities of capital investment. The highest grades of shoes are "fine turns," ladies' wooden heel "fancies," and gentlemen's fine custom lasts. These industries are confined to the small personally superintended shops of Haverhill, Brooklyn, and Newark. They are the nearest approach to the old-fashioned custom shops where a few dollars worth of tools was all the shoemaker required. At the other extreme is the large capitalistic establishment of the McElwain Company, manufacturing the cheapest kind of shoes in immense quantities. This company has introduced very many economies of large-scale production, but at enormous cost of equipment. It would be as impossible for a Newark shop to make the McElwain shoes economically as it would for a McElwain factory to turn out a Newark shoe. Each is successful in its own line because it has solved the problem of the balance between the labor cost and the fixed capital cost. But the balance is determined by the size of the output, or rather the quantity of product most economically produced. Should the Newark shop introduce the McElwain large-scale efficiency methods in the endeavor to increase the quantity of its product it would turn out so many "seconds" as to first ruin its reputation and then itself. Should the McElwain Company try to reduce its fixed capital expenditure by substituting more labor for costly equipment, either its labor costs would rise higher in proportion, thereby increasing the cost of its product, or else the quantity of its product would be reduced, thereby increasing the pro rata costs of the fixed capital and therefore the costs of the product. In other words, the Haverhill, Brooklyn, and Newark manufacturers (at least those who are permanently successful) have discovered that nice and delicate balance between the ratio of labor and capital costs on the one hand and the quantity of their output on the other. They

have discovered that with small capital costs proportionally to the total value of the product they must adopt small-scale production. And the McElwain Company also has discovered its own proper balance—that with a large proportion of fixed capital costs in the total cost of the shoe they can adopt large-scale production. The manufacturer described in the preceding paragraph, who was successful with a small cheaply equipped inefficient shop but unsuccessful with a large expensively and efficiently constructed shop, had not discovered the proper balance for his particular grade of product—the proper scale of production for the most economical ratio of capital and labor required by his particular grade of shoe—therefore he failed.

The conclusions to be deduced from these observations of the shoe industry are in brief as follows:

1. Given a constant quantity of labor, constant as evidenced by its costs, in the manufacture of a given grade of product, the quantity or cost of the fixed capital to which it is applied affects the quantity of the product that can be economically produced. (Economical production is evidenced by rising or falling costs, and, in the long run, failure or success in the competitive market.)

2. In the production of any given grade of product there is “an exactly right” scale of production; a change in the scale, either increase or decrease, being reflected in a diminution of the quantity of the product—a diminution evidenced by rising costs. (By scale of production is meant the size of the unit combination of labor and capital conducted as a single establishment or unified group of establishments.)

3. If the grade of product demands proportionally a large quantity of capital corresponding to a small quantity of labor (that is, low labor cost), then the “exactly right” scale of production is large. And, conversely, if the grade of product demands proportionally a small quantity of capital to a given quantity of labor (that is, high labor costs), then the “exactly right” scale of production is small.

We turn now to the other set of observations, dealing with cases where the costs of capital remain constant but the quantity or cost of labor varies. A highly instructive series of such cases is afforded by those metal and munition manufacturers who accepted large-scale orders from belligerent governments at the outbreak of the European war. The American manufacturers, especially in the metal industries, were lured into taking foreign government

orders by high prices and the correspondingly liberal expected profits. They were forced to use their existing plants, although in some cases additions were hurried forward even by searchlight. Increases in equipment were not, however, important in the first hectic rush; so that we are dealing with a rather unusual condition of a constant quantity of fixed capital yielding a product under markedly varying quantities of labor. In many cases the labor was doubled, in some cases even trebled, changing from one ten-hour shift to three eight-hour shifts. Labor was increased intensively. More helpers were assigned to each master; there was greater division of labor and elimination of special work. The results were a disappointment to the managers. The product was not increased proportionally. Three shifts did not produce 2.4 times as much as a single ten-hour shift; the increased intensification of labor within the shop did not make a corresponding increase in the quantity of the product.

If the matter were allowed to remain there, the failure of our manufacturers to meet the sudden and very unusual demands put upon them by the war would be attributed to the rôle of the law of diminishing returns in modern industry. But the experiences of the munition and metal manufacturers were different. In some cases, as with the manufacturers of timing devices for shrapnel shells and other materials requiring fine handwork, the disaster which befell the contractors was worse than that of other larger establishments taking contracts for the kind of war material that could be turned out largely by machinery. The little Connecticut or Vermont shop that undertook the handwork subcontract was ruined, whereas the Bethlehem Steel Corporation, the Westinghouse Electric and Remington companies merely made less money than was anticipated. The handwork shops attempted large-scale production by merely increasing the quantity of labor, and disaster overcame them immediately. The establishments already committed to the manufacture of products in which the cost is largely one of fixed capital, plants already large-scale in comparison with the others, were able to increase yet further the scale of operations without serious loss. And it is notable that the particular steel company which suffered the largest relative curtailment of anticipated profits, the Crucible Steel Company, has, more than any other of the large steel companies, a considerable labor element in the cost of its product.

The conclusions to be drawn from these unusual cases of war

manufacturers are similar to those outlined before as applicable to the shoe industry, only here there are varying quantities and costs of labor with a relatively constant investment of capital.

1. Given a constant quantity of fixed capital, varying quantities of labor affect the quantity of the product that can be economically produced. (Economical production is indicated by rising and falling costs of the product—the outward evidence of rising or falling costs being the failure or the success in the competitive market.)

2. There is reached, easily, a point of excessive costs of production as the proportion of labor is increased with respect to a given quantity of fixed capital.

3. If the grade of product demands proportionally a small quantity of labor to a given quantity of capital (that is, low labor costs), then the most profitable scale of production is relatively large. Conversely, if the product is such as to demand a large quantity of labor with respect to a given quantity of capital (that is, high labor costs), then the most profitable scale of production is relatively small.

These conclusions are identical with those reached from using data drawn from the shoe industry. The first two of them may be passed over, for the moment, as representing merely the consequences that would follow were some form of the law of diminishing returns applicable to manufacturing businesses. On the extent to which this is true it is not the present purpose to dwell. But the third conclusion, alike under both conditions of varying capital investment and varying applications of labor, is of importance in throwing a new light on the conditions of production in manufacturing businesses.

It appears that when the quantity of labor to be applied to a given constant of fixed capital is varied, different types of industry respond differently to the changes. If the industry manufactures a product in which the labor element is large, the quantity of that product cannot be increased by increasing the quantity of labor, except at a very large increase in the cost of production. If, on the other hand, the product is one in which fixed capital is far and above the larger element in the final cost, then a sudden increase in the quantity of labor working upon the capital invested will not so seriously affect the cost of the product.

This result, deduced from a study of data drawn from the shoe and the war materials industries, is not a mere coincidence. Both

the unreflective business man and the economist observing present-day industry have long felt that somehow there must be some general principle underlying the apparent confusion in our observations of large and small-scale production. The practical business man, with what he calls "horse-sense" discriminates among manufacturing businesses according to differences in the quantity of labor that goes to make up the product. He says, "If you have little capital, go into a business with a good deal of handwork." At first sight the truth of this bald, uncritical statement would appear to be based merely on the assumption that such businesses are the only ones available to limited capital. Yet if this negative reason were all there was to this advice then the man with little capital would be eliminated by the competition of larger capitalistic organizations. But, in truth, the practical business man acknowledges in this simple aphorism of the street that the man with little capital survives in those businesses where labor predominates in the cost of production, whereas he cannot survive with his small plant in those industries in which machinery predominates in the production costs. This is another way of saying that sufficient special economies to enable the producer to sell in a free competitive market can be attained in a small sized shop if labor predominates in the cost of production, whereas if the labor costs are relatively small only the shop capable of manufacturing large quantities of the product can survive.

And this rule of thumb of the practical business man is in strict accord with the conclusions previously drawn from the shoe and war munitions business. It is, moreover, frequently tacitly assumed in the discussions of economic theory employing the concept of the law of diminishing returns in its classic form. The economists admit that the law does not operate at every point of intensive production, not even in its classic field of agriculture. It is quite probable, for illustration, that within ranges of very meager cultivation two days' labor might produce more than twice as much product as one day's labor. If a man spent one day plowing a plot of land and then carelessly planting it, there is very strong probability that it would not produce half the product it would produce if he spent two days' labor in plowing, harrowing, and carefully planting. Obviously, the law of diminishing returns begins to operate only after some labor and some capital have been expended on land beyond the irreducible minimum. Obviously, there is a point in agricultural production up to which the

returns increase more than in proportion to the increases in labor and capital. Beyond this point the returns decrease. There must, therefore, be a point where increasing returns cease and diminishing returns begin, a point of perfect equilibrium. From this point either a decrease or an increase of labor or capital results in a decline in the relative quantity of the products.

A study of the position of this point of equilibrium in various forms of industry has never seemed significant to the student of economic theory for two very good reasons. In the first place, as has been said, our minds have become accustomed, both from the literature of the subject and the ease of exposition, to deal with the law of diminishing returns as essentially an agriculture phenomenon or at most confined to extractive industries. The comparison of its operation in agriculture with its possible working in other industries has seemed, therefore, neither pertinent nor of practical moment. And, again, the conditions under which labor and capital are applied to land vary so with locality, soil, and custom that any single practical demonstration of this point would have little or no significance beyond the isolated case. But if the law of diminishing returns is recognized throughout industry, then the understanding and comparison, in different fields, of this point of equilibrium becomes one of the most significant of strictly theoretical economic problems.

It is this comparison which leads to the conclusion, drawn from various industries, that there is a point of maximum productivity as the quantity of labor and of capital is increased, but that this point varies in position according to the relative proportions of capital and labor represented in the final product. If the product is fine shoes, representing a large ratio of labor to invested capital, the point is reached in a relatively small scale of production; if it is inexpensive low-grade men's shoes, it is reached only under conditions of very large-scale production. Clearly the position of this point at which increasing returns cease and decreasing returns begin, a point found somewhere in every industry, varies according to the relative proportion of labor and capital represented by the final product. This connection between the two can be stated in the form of a new law; or, better, a general principle approaching the rigor of a law as near as the flexibility of economic phenomena permits. It is this: *the ratio between the quantitative values of labor and fixed capital in any unit or product determines the point at which increase in the scale of total*

production ceases to be economical; i.e., it determines the point of maximum productivity beyond which further investments of fixed capital and further increments of labor cease to yield the same proportionate quantity of product. This may be called the law of maximum balanced return, or simply the law of balanced return. It represents a more abstract statement of the third conclusion previously drawn from the shoe and the munitions industries. The rest of this article is devoted to its further exposition.

This principle can be expressed in various forms. It means merely that there is a direct connection between the scale of economical production, the point of equilibrium when increasing returns ceases and diminishing returns begins, and the proportion of labor and machinery that goes into the manufacture of an article. Imagine the cost of producing a certain pair of shoes to be \$1.50, of which 50 cents represents the interest, depreciation, and obsolescence of all the machinery, factory, plant and power system, together with the rentals of hired equipment, that can be borne by this one pair of shoes. Imagine that \$1 represents the wages of labor and superintendence. We may assume, therefore a ratio of one to two between capital and labor costs for this particular article. Imagine another pair of shoes of which the total cost is also \$1.50 but of which the capital costs are 75 cents and the labor costs 75 cents; obviously the ratio here is one to one. Now, if the principle outlined above is correct, it will follow that these two ratios give the key to the scale at which production may be carried on for the two classes of shoes. This scale will be larger for the second class than for the first. One would like, following the ideal of quantity which all general principles strive for, to say the scale will be twice as great. But one must freely admit that the rigor of quantitative exactness is a remote ideal for economic theory. The principle is at least true that a direct connection exists between the ratio of capital and labor costs on the one hand, and the scale of production permitting the lowest costs, on the other hand. To what extent their connection may be reduced to rigid quantitative terms is, at best, a matter of empirical evidence.

Numerous instances having to do with large and small-scale production seem to justify this principle in our actual experience. The most significant revelation of the history of industrial consolidation that followed the depression of the middle nineties was that the anticipated economies of large-scale production were not

forthcoming. In certain industries, such as the steel industry, the divergence between theory and practice was not as marked as in others. But, nevertheless, in spite of exceptions, the fact remains that the industrial consolidations based on the fundamental presumption of the economies of large-scale production were a profound disappointment to the student of economics and the practical business man alike. And the error in the judgment of both was the same, the unintelligence and limitations of human labor. Its economic efficiency is not increased by mere quantitative additions. On the contrary it is decreased. Consequently, an increase in the quantity of capital did not produce a corresponding increase in the quantity of the product because the productivity of the labor element could not be increased by mere quantitative accretions. A sudden increase in the real quantity of capital and the apparent quantity of labor carried the scale of production in the vast majority of industrial consolidations beyond the point of balance, where the increasing returns ceased and diminishing returns began. There is this fundamental contrast between labor and capital, a failure to realize which blinded the promoters of the industrial consolidations. In those types of industry where the human element is of small importance in the final product an increase in the quantity of labor applicable to capital could be made to keep pace with an increase in the capital even up to a point of an extremely large scale of production. This is now true of the steel industry. The fixed capital has become enormously large, but less and less does labor play a part in the final product. The very purpose behind the increase in fixed capital has been the substitution of mechanistic production for human. And as the ratio between the quantity of capital applicable to each unit of labor has increased, the scale upon which production can occur economically has increased correspondingly. In fact, so far has the successful substitution of machinery for labor been carried in the steel business that it affords to the minds of many students the best example in modern industry of economical large-scale production. It has been reported by four entrepreneur steelmakers, of wide experience and acute understanding, that no thoroughly economical establishment for the manufacture of steel and its simpler products can be built short of ten millions of dollars. Coupled with this large scale of production is the fact that in the value of the final product, the pro rata share of the fixed capital is enormous, while the labor costs are exceedingly small. That

the labor costs are proportionately the smallest of any industry would be difficult to prove, but it is a matter of personal judgment.

Another rather striking example is shown by the increasing scale of production for different forms of tobacco products. When the American Tobacco Company was organized it succeeded immediately in securing a monopoly—upwards of at least 90 per cent of the production—of machine-made cigarettes. This is the branch of the tobacco business in which production is conducted on the largest scale. It requires complicated and expensive automatic machinery, but at the same time a minimum of hand labor. And the old American Tobacco Company easily drove out the small competitors in this line through superior factory equipment, the result of liberal capital expenditures. Having secured a monopoly in this single form of product the company made it doubly sure by acquiring the patents covering the essential machinery. But the branch of the tobacco industry which the American Tobacco Company succeeded in neither monopolizing nor even gaining a dominant foothold in, in spite of uninterrupted efforts for upwards of twenty years and a large investment of capital, was the manufacture of cigars. This is the very branch of the industry in which hand labor is everything and machinery nothing. A skilful entrepreneur with a few thousand dollars of capital, employing a few cigarmakers, buying his materials carefully, and personally supervising the work can produce a high-grade cigar actually cheaper than can a large establishment having unlimited capital at its disposal. In other words, the point of largest economy of production is reached very soon in the high-grade cigar industry, very late in the machine-made cigarette industry. But the production cost of the cigarette is mostly the cost of the fixed capital, whereas in the cigar this cost is almost negligible. On the other hand, the labor cost of the cigarette is small, of the cigar very large.

All this is mere illustration of the principle, before abstractly stated in the italics, that the point at which the law of diminishing returns begins to operate as the scale of production is increased is determined by the ratio between the labor costs and the capital costs. Those industries which produce articles involving artistic handicraft or high technical skill must inevitably operate under conditions of small-scale production, because the point at which increasing returns end and diminishing returns

begin occurs early. On the other hand, if the article does not require the intelligent attention of skilled labor, the operation of a law of diminishing returns may be postponed to the extent that capital investment in appliances may be substituted for skilled labor, that is, the cost of fixed capital may replace the cost of labor in the finished product.

Little has been said thus far concerning the significance of entrepreneur ability as a condition determining the quantity of the product. This omission was intentional because the classic statement of the law of diminishing returns passes over this matter entirely and it would have been confusing to assume the question. Yet no one aspect of the traditional statement of the law shows its obsolescence more clearly. Probably when the law was first formulated one could presume a certain uniformity of entrepreneur ability throughout all agricultural and extractive industries. Such a situation might have been true once (purely a historical question), but it certainly is not true now. Yet that is exactly what the law of diminishing returns presumes; in truth, were such a presupposition not so contrary to fact it would have been added as a fifth presupposition to the four outlined at the opening of this discussion. To presume with certainty that an increase in the quantities of capital and labor added to land does not bring about a proportionate increase in the quantity of the product, presumes that the same or inferior entrepreneur ability is exercised with the increased expenditures of capital and labor. But in actual practice a constant of entrepreneur ability is the most difficult thing to presume. Conceivably a man might cultivate a plot of land expending on it one unit of capital and one of labor. The succeeding year he might cultivate the same plot doubling both capital and labor and at the same time using greater knowledge gleaned from the previous experience. Almost surely his product will be more than twice as great, and conceivably might be three or four times as great. Similarly, two adjacent back-yard gardens, tilled with the same amount of capital expenditure and number of hours of labor, produce such different quantities of product that one is sheer economic waste and the other constitutes a valuable contribution to national wealth. In brief, the statement of the law of diminishing returns, as it has been formulated in the textbooks of economics, omits altogether that one element which the actual conditions of modern industry is bringing more and more into paramount importance—entrepreneur ability.

The entrepreneur function has a very important rôle in what we have here called the law of balanced returns. Clearly the most important question in all businesses, what one might call the key to all questions of industrial policy, is this very question of the scale of production likely to bring about the maximum efficiency. By maximum efficiency to the business man is meant the conditions likely to produce the largest quantity of product at the lowest cost consistent with the probable market. This is merely another way of phrasing this point of balance or equilibrium between increasing and decreasing returns. To gauge it aright is the paramount question of the entrepreneur function in all business, the question which boards of directors and ultimate managers must determine. The lesser managerial functions may, in the majority of cases, be delegated. This cannot. A mistake here in determining the scale of production is so vital to the wise conduct of the business that no amount of lesser economies and minor shop palliatives can overcome the error. On the other hand, the business may absorb a host of wastes and shop inefficiencies if only the entrepreneur ability of the management is sufficient to reason out the scale of production which approximates, in practice, the theoretical balance between increasing and decreasing returns. The key to this scale is, as the body of this article seeks to show, the ratio between the labor cost and the capital cost represented in the final product.

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THE BASIS OF WAR-TIME COLLECTIVISM

1. *The Central Principle*

How much of the near-socialism of this war is temporary and how much, if any, will be permanent? Some of the needs that have given rise to collectivist policies have been created by the war, but others have been merely revealed. The net result is to give social policy a definiteness of objective it has not had before in America, and this effect will not quickly evaporate. The need of a more coherent social organization is probably not less great in times of nominal peace, merely less obvious and less immediate, and it tends to be met by methods which, because they are more leisurely, involve less centralization and less compulsion.

The actual forces at work are manifold, and seem to defy any attempt to reduce them to simple formulas. There does, however, seem to be one principle which in one form or another is at work in such a surprising variety of manifestations as to suggest that it may be the dominant fact from which a true understanding of the situation can best proceed. War has given us an economy dominated by one supreme end so that all other things take rank according as they contribute or do not contribute to that end; and that end is something that can be defined in objective terms, at least in its economic aspect, so that the worth of services can be tested by an objective standard.

This testing can be done by the combined application of science and common sense, to an extent unknown in times of peace, and quite independently of the so-called "economic" valuations that appear in prices. These latter are not objective tests but subjective, since the ultimate fact is somebody's preference for one kind of gratification rather than another, and that is a matter of taste concerning which: *non disputandum*. In the sense in which the term is here used, calories and protein units are objective tests of food, but taste is not and price is not, so far as it merely records taste.

It is hard to express this transformation adequately in any one word. In a sense it means that our national life has become standardized where before it was unstandardized: is dominated by objective standards rather than by subjective preferences. It is standardized in the sense that we have furnished to us a touchstone for the measurement of all values, which gives a true standard in a way in which prices do not; and standardized in the

further sense that men and women become of value themselves in the new scheme of things not in the measure of their differing tastes, whims, or capacities for appreciation, nor in the measure of the purchasing power which they may have secured by fortune or a prudent choice of parents, but rather, at bottom, in the measure of elemental needs which all share in common and most of which a scientific expert can prescribe for better than the people themselves. The expert can standardize consumption. He can also standardize production, since the importance of quickly bringing all work into line with the best known practice is greater in the present emergency than the vaguer and more distant gain from our ordinary plan of letting each producer go his own gait. We will get both kinds of gain if we can, but at least we will make sure of the one that is actually in sight. In a word, our society, as an organization, knows what it wants and can draw up specifications. As a result, the social product of industry is no longer always reckoned through the accounting of private acquisition, and its function of social service is no longer incidental to profits, but has become the dominant fact, and independently determined.

In an individualistic democracy things are worth what they are worth to individuals; in a state of war the individual himself is worth only what he is worth to the state. What things are worth to individuals depends largely upon whether or not they give them a good time, and good times are, fortunately, not yet a standardized commodity. What the individual is worth to the state depends first of all on physical health, which is a perfectly definite thing, the same for everybody, and definable by the doctor in terms of the absence of any "abnormal" or "pathological" condition. Psychological well-being and willingness to serve also come into the calculation, and a certain amount of good time may be necessary on that score, but the individual is no longer, to the same extent as before, the final judge as to how much of other values he shall sacrifice to the good time he wants to have on any particular Saturday afternoon.

Another element in the situation is no less important. The economic life of a progressive and peaceful state is on the aggressive, while economic life in the time of war is sharply on the defensive. When a nation is deliberately doing its best to spend a third or a fourth of its national income on fighting, there can be little to spare for enlarging the bounds of economic consumption even for the most fortunate, if the resources of the nation

are wisely managed. And for the country as a whole, the result is a condition in which, instead of reaching out in the interesting and unstandardizable process of assimilating untried gratifications, the vital problem is to save the people from wanting the absolute necessities. Thus in any sudden need for retrenchment, in war or peace, our attention is necessarily focused on computable things and things which are the same for all, with variations in need which the scientific expert is best fitted to determine. In this somewhat expanded sense, then, war has given us a standardized economy in place of an unstandardized, or an economy of objective tests in place of an economy of subjective preferences.

2. *The Unstandardized Way*

When war demands that all the productive force we can spare be put into its workshops, these forces must be diverted from the pursuits of peace. If we follow the method of private enterprise in making the transfer, the government finds itself not merely paying men to make munitions and so turning productive forces in that direction, but, to just the extent that it pays extra high wages to munition makers, it places them in a position (of which they do not neglect to take advantage) to *bid with their own pocket books against the government by hiring as much labor as they can command to make for them the cigars, victrolas, pianos, and other unaccustomed luxuries which their high wages enable them to afford*. And this paradox is quite characteristic of the methods of unstandardized individualism when used to mobilize a nation's resources to meet a closely standardized or standardizable need.

If the free-exchange way of doing things is so absurdly organized that it tends partly to defeat its own ends in the fashion just indicated, why is not this fact just as obvious in peace time as in war? It may well be asked, indeed, just how and why the individualistic system is organized as it is in time of peace, and whether it is, as a matter of fact, just as unsuited to the highest efficiency in ordinary times as it appears to be, if left to its own devices, in time of war. It is a system for giving society the things that it wants, but what does society want? It wants what its members do, but they want different things, and are bidding against each other, some with enormous bidding power and some with almost none.

Society is willing to weight men's wants in whatever fashion

the distribution of purchasing power dictates, regardless even of how that distribution of purchasing power came about. If Smith can persuade people that they want just the particular kind of hat he knows how to make, he appears at the same time to be persuading society that it wants Smith, who is well nourished and well clothed, to have a victrola, in preference to giving the Jones family, who are under-nourished, a little more substantial food. On the basis of the happiness of the greatest number, where "every man counts as one," the men serving Smith are inefficiently employed. Theirs is not the primary efficiency that can be measured in this Benthamite fashion, but a derived efficiency: derived, that is, from the superior worth given by society to the person for whom they happen to be working. Moreover, "Society" would seem to be very easily persuaded, for such an all-powerful organism, and to be remarkably fickle. In time of peace, enlarged consumption seems to be the most effective end of economic life, and complete equality has not been adopted as an ideal. Smith's enlarged consumption is, then, a contribution to the end for which society is working. It is a bit of social success. In time of war, consumption is not an end of life, but a means to an end. Any unnecessary inequality, involving excess over the efficiency standard on the one hand and shortage on the other, is an evil, for unless ordinary goods are efficiently and equally distributed there will be less for the extraordinary needs of military supplies. Smith's extra consumption is a subtraction from the end for which society is working: it is a bit of social failure.

Consumers are habitually waiting to be told or persuaded what to want. Nobody can tell them absolutely, and all that can be done is to persuade them; a business carried on in lively fashion by thousands of agencies, each working against the others, and producing a net result far less valuable than the sum total of their individual efforts would lead one to expect. The consumer is exposed to much repetition of mutually inhibitory stimuli; and, in place of information he can trust, he must do the best he can with the light he can get from salesmen and advertisers, whose statements he is generally too canny to believe fully, even though they may in some cases be true.

Some things he does not have to pay for, if he is wary, and as a result such things fail to command a price proportionate to their worth, and so fail to enlist productive energy to the extent that would pay, for the community as a whole. Where things

have to be done for the benefit of the whole community if they are done at all, any one who voluntarily pays to get them done knows that he will do all the paying and every one else will benefit. In particular, if knowledge cannot be surrounded by a private property fence, the private incentive to produce it is weak; and if it is so fenced in, we are prevented from utilizing it to anything like its full capacity after it has been produced. Under the guidance of price, then, with its blind spots, and its somewhat fickle way of rating human beings, the productive process goes on and productive sacrifices are incurred.

Most of these sacrifices have to be paid for, for it is the avowed business of law to see that people's interests are not "unduly" sacrificed without consent. This fact tempts one to say that the process of production is worth what it costs to all those who engage in it, just as the business enterprise itself gets a money income at least equal to its money outgo and shows a balance of net income on the books. To be sure, this idea of a net surplus of gain over sacrifice may seem somewhat strange in the case of a family which is going to pieces because the father is disabled for work and the mother is undermining her health and neglecting the upbringing of her children, working in a vain effort to make both ends meet. The cost of her work is disastrously great. If she did not work, perhaps the disaster would be even greater, but what kind of surplus can be made out of this bookkeeping? The family has to choose between two alternatives, either one disastrous; but is that the only way the problem can be framed? Is society limited to these two alternatives in its dealing with the problem? Not at all. Its cost accounting has a different baseline from that of the individual for it can, if it chooses, save the family without forcing the mother out of the home and ruining her health.

So much for the costs that cannot be incurred without consent. Some costs are of a more elusive character, and slip through the meshes of the law. As a result, the process of competitive selection approves as "efficient" in the business sense many forms of parasitism which mean national inefficiency. Even aside from parasitism, it is a mistake to suppose that the efficiency of a nation is the sum of the efficiencies of its members. Each member is one hundred per cent efficient if he does the best his conditions make possible, but the conditions determine how good that "best" shall be, and they are the task of society. Business competition

ensures a close approximation of individual achievement to the possible, but does not guarantee such underlying conditions as to make the possible itself a maximum.

Why do we tolerate the system which this impressionistic and one-sided sketch characterizes? Is it merely through inertia? If so, we are at present going through the greatest inertia-overcoming experience of modern times. But that is not by any means the only reason. The measure of the market has prevailed in spite of being an imperfect standard of social value and social cost, largely because, imperfect as it is, we have had no definite substitute. Our society has not, as a unit, had independent knowledge of what it wanted, and so has taken the market's word as the measure of the worth of different gratifications and the efficiency of different ways of producing them. It has certainly not wanted a stereotyped economy, but rather one moving on to things whose nature no one could predict.

3. Summary of the Effect of War

Under the stress of war, the fear of losing the elasticity necessary to future progress no longer deters us from making the biggest gains immediately in sight. These lie, at any time, in eliminating the definite wastes and duplications of competition, filling with direct public services the gaps due to the blind spots in the competitive system, and generally attacking the shortcomings which have just been indicated. Thus we see aeroplane companies exchanging patents and railroads pooling their competitive interests and insisting on full loading of cars where competitive forces had left the requirements so liberal as to be wasteful in time of shortage of equipment. We are putting all essential industries under the supervision of federal boards in search of an efficiency greater than the efficiency of competition. Mr. Hoover is interfering, and German food and clothing regulations are interfering still more, with the individual's supposed bent for organizing his consumption on the basis of maximum psychic income.

And as a result of all such departures, far from sacrificing the possibility of growth of efficiency in future, we are rapidly putting ourselves in the way of acquiring, from a few years of war, more genuine experimental knowledge of the conditions of economic efficiency in the large than we could probably have gained in as many decades of individualism, business competition, and the ventures in social-economic experimentation that can be argued

through legislative assemblies in time of peace. Much of this knowledge will be of permanent use if we can learn to employ standardization within its proper field. This is far more limited in time of peace than in time of war, but is rapidly increasing. Indeed, for many of these experiments the present war is merely the occasion, and the true determining cause is nothing less than the standardizing influence of the progress of science itself, and of scientific production.

4. *The Socialization of Knowledge*

As the war rolls over us, and wakes us to a sense of the necessity of doing the impossible, we suddenly become aware that we have resources of knowledge that are comparatively little utilized. Consumers for the most part order their diet in sublime ignorance of true food values, and wage an unequal contest with the swiftly changing arts of adulteration and imitation. The knowledge of qualities is there, but the consumer does not possess it, and it is out of the question that he should get it by his own unaided efforts.

Indeed, he has never guided his purchases by his own unaided efforts. Nowadays his guidance requires mobilized knowledge rather than unmobilized habit, and knowledge of a detailed scientific character about a multitude of things, such as only specialized researches can supply. The consumer has not hired these things done for him, partly because he did not know how badly he needed them, and partly for the reason, already treated, that knowledge is not appropriable like the ordinary commodity. The present wave of public education into the mysteries of proteins and calories, then, is but a phase of an inevitable development, due to science and scientific methods of production.

Producers, as well as consumers, suffer from imperfect utilization of the existing stock of knowledge of their trade. A certain firm recently sent representatives to study the methods used in building wooden ships, and found that some were good at one part of the process and some at another, but none had methods of high efficiency throughout. They estimated that by combining the best methods found for each separate part of the process they would be able to turn out a ship in a fraction of the best recorded time. The standardization of methods, combining the best that is found anywhere, can not only raise the average efficiency of industry but even show the most efficient how to improve still farther by strengthening his weak points,

But it does not necessarily follow that all industrial knowledge should be pooled. The present channels for interchange of knowledge are more efficient between producers than between consumers, and complete pooling might injure the incentive to private inventiveness in the future. What is needed here is a discriminating policy. For the immediate emergency any amount of pooling that can be secured will be clear gain, and will have no bad effects on future progress. After the war, if the socializing of trade knowledge is to be continued in any industries, there will be need of a more formal system fortified with more substantial inducements. Meanwhile the experience of the war, if properly utilized, will be furnishing valuable testimony as to where the greatest gains are to be had.

As these words were being written, the morning paper arrived, with the announcement of a new American aeroplane engine, said to be as good as the best foreign engines, and combining many of their best features, but capable of being turned out in large numbers by American standardized machine-process methods, rather than with much hand labor of many artisan-technicians, as abroad. This achievement seems to have been made possible chiefly by the pooling of engineering talent and of all available designs, methods, and trade secrets, under an incentive strong enough to spur men to work twenty-four hours a day.

What does this prove? It proves that there are great unused possibilities for immediate advancement in private industries where patents or secret processes are held, or where local producers are out of touch with each other's achievements. It gives one a sense of the sudden liberation of pent-up forces that reacts into sheer exasperation at the obstacles of ignorance and inertia which hamper us, and the walls of secrecy and proprietary prohibition which we erect at such pains and guard so sedulously. It furnishes a prospect of continued progress, also, but chiefly through the testing and coördination of ideas and devices worked out under the spur of the most active of all forms of competition at the fighting front.¹ In other words, it does not prove that all competitive incentives can be discarded and all competitive barriers broken down.

¹ "The standardization of the new engine does not mean there will be no change in it during the war. There will be continuous experimentation as new types and improvements develop at the front and new ideas are born of the war emergency." Statement of Secretary Baker on the new "Liberty Motor," as reported in the *New York Times* of Sept. 13, 1917.

There will probably be no final permanent solution of this question, because our industrial system will never reach a completely static condition. The period that will follow the closing of the war, however, will be neither wholly socialistic nor individualistic in the old way, and it may be possible to predict some of the things which will decide which are the best fields in which to continue with the socializing experiments to which the war has given rise.

There are certain fields where the progress that is due to the spur of private incentive is hardly notable enough and rapid enough to be worth keeping, if to keep it we must sacrifice any experiment which has a prospect of showing really substantial results. These backward fields are chiefly the ones in which business is in the hands of many small producers, or carried on in small places with the aid more of handicraft skill than of mechanical devices and engineering or scientific methods. Very small producers cannot afford to experiment extensively, nor to study the methods of other producers in the attempt to standardize their own, and it would be a ruinously wasteful duplication of work if they were to do so as individuals. Extremely small producers cannot even be expected to be in a position effectively to organize themselves into associations to do this sort of thing for them, although that is one way in which the dilemma may in many cases be solved. Another solution, far less desirable, is the extinction of small producers by larger ones who can afford the study and investigation required to standardize efficiency.

This amounts to sacrificing the small producers, not because they cannot be as useful or perhaps more useful than large ones in the actual work of production, but because they cannot organize and standardize their work as well as carry it on. It would amount to sacrificing them because they cannot be as efficient as larger producers in fulfilling the particular combination of functions which the present system requires of them, when a slight redistribution of functions might leave them fully able to hold their own and to prove their right to survive by the quality of service rendered.

If the standardizing can be done for them by some large agency, they may prove, on account of their more direct contact with the details of the business and the more intimate relation between owner, workman, and consumer, to be better adapted to handling the industrial problems which hinge on these unstandardized and

very human relations. For example, if systems of accounting, stock keeping, and organization of space can be standardized for the various kinds of retailers by studies made on a large scale and market information secured by some large-scale agency, the small retailer will have presented to him the means of equalling the advantages which the chain store now has over him in these matters, and he need not spend his time and energy on the kind of problem at which he is necessarily working at a very heavy disadvantage, but can spend it all on the sort of problem which no standardized system can solve for him, studying his customers' tastes and adapting his policy to the peculiarities of his local market.

If local producers are so far out of touch with each other that they make no attempt to imitate each other's strong points, but each continues in his own groove, satisfied with the methods he has developed himself and with his achievements in those parts of the process in which he himself may be superior, this fact itself is evidence that the competitive stimulus is not strong enough to do the work we rely on it to do. In such a case one need not be afraid of the weakening of competitive stimulus which would come from pooling the knowledge of the trade, for there is so little stimulus to lose. There would be no grave danger even in going to the length of standardizing the process and trusting to coöperative enterprise, or the "instinct of workmanship," or even to governmental experimentation, for the means of future progress.

Besides those cases in which private incentive is notably weak, there are cases in which a coöperative or public agency is equipped to do the work notably well. Where the chief thing needed is accuracy, and the most important industrial quality is disinterestedness, there is little need of the stimuli of ordinary industrial competition, and they may, indeed, be fatal to the peculiar reliability of result that is wanted. In the case of employment agencies, for example, we are rapidly finding out that the disinterestedness of a public agency is a far more essential quality than any of the good points which private enterprise may have in this field. This is but another form of the socialization of economic knowledge. The diffusing of information about prices is an important service which may in some cases be well rendered by private enterprises, but is by no means certain to be rendered at all unless some public agency takes the responsibility.

One clear case of this is the work of testing things where standardized methods of testing are available. In other words, it is the

sort of work which the present federal Bureau of Standards is doing, with an ever widening scope. The further work of establishing standards of performance, based on the best existing practice, or on the combination of the best single elements to be found in existing practice, into a new standard better than anything actually found—such work as this, in well-selected fields, is clearly a proper function of government in the present state of industrial and scientific development.

5. *The Social Minimum*

Prohibition and rationing policies are but the wartime form of a policy which has been becoming more and more clearly formulated in time of peace: namely, what we have come to know as the policy of the social minimum. In one way or another the principle by which purchasing power carries with it power over all the earth's resources, even to the shutting out of some from the material means of opportunities to become efficient; this principle is limited, or supplemented, by the principle that some things are so important that society cannot afford to leave them at the mercy of this rule of distribution, but must see to it that they are distributed under a system in which every one counts as one. The minimum that is thus furnished is, in its most important aspect, a minimum of opportunity—opportunity to maintain health, to acquire knowledge, to know beauty, and to mobilize one's abilities to the best advantage.

There are two ways in which the proportion of society's whole resources that goes to the furnishing of this minimum may become greater, and the field of individualistic distribution be correspondingly diminished. Any great loss or catastrophe means that there is less to spend on anything beyond the necessities of life, and less surplus, even of these necessities, above the bare minimum necessary for continued existence. It is only when the unaided individual has at least a fair chance to be able to take care of himself that the free exchange system can become dominant at all. A great fire, an earthquake, or an invasion seems automatically to put the other rule in force; and we fall without question into the system of distributing food and blankets to rich and poor alike and making every refugee wait his or her turn for railroad accommodation, regardless of what fabulous prices some may be willing to offer for tickets.

But there is another way in which the scope of this principle

is enlarged: by a force that operates more quietly, more constantly, and all-pervasively. The more we find out about life and how to make things useful, the more things do we find to be necessary to fully efficient living and working. Material conditions which used to be regarded as matters of taste are found to be possible sources of health or disease, physical or mental. In a sense, since everything in the environment has its effect on man's development, perfect equality of opportunity demands equality in all possessions and all services received. But be that as it may, what we have at present is a compromise system, in which individuals get special rewards in the shape of special purchasing power which they are nominally free to use as they will, but on which there are certain definite limitations so that their power to buy more than others is by no means as great as if the whole of a man's gratifications were left for him to buy for himself in the market.

Economic inequality is being attacked in two ways which we may call extensive and intensive. Its extent is attacked by progressive taxation, while the range within which superior purchasing power gives superior power to satisfy wants is limited by the policy of the social minimum. Beginning with such obvious things as poor relief and free education we go on to free lunches for school children, free amusements, free public parks and playgrounds, and public employment agencies; while the handling of the public domain under the Homestead act furnishes a fine example in which a commodity which stands for the basic opportunity of all is distributed in a way which virtually disregards purchasing power in the ordinary sense, and instead makes the price consist chiefly in the willingness and ability to use the opportunity presented. It is an effort-price; such a price as the poor man can afford to pay and the rich man cannot, rather than the ordinary money price which the rich man can afford to pay and the poor man cannot.

From what has been said it may be inferred that the principle underlying the rationing of a population through bread tickets or similar devices is no new thing, and that as long as the world feels the pinch of shortage in foodstuffs, it will continue some form of public control so that waste may be prevented and no class consume so much as to involve the serious undernourishment of others. The methods of securing the social minimum are various. Those who cannot afford it may have it supplied to them

direct by some public agency, and the rich may be left free to spend their incomes as they will, subject only to the competition of the government itself in buying the things which it distributes. Or, without going as far as this, the price may be put artificially low and the inevitable excess demand from the well-to-do may be kept within bounds by limiting the amount which any one person is allowed to buy. This is the familiar "bread ticket" policy, and it involves an amount of supervision which has not hitherto been found possible in ordinary times, while even in time of war the growers of foodstuffs are themselves to a considerable extent immune.

Another method which has the effect of limiting the power of money in private hands to turn the productive resources of the nation away from the production of the necessities into the making of luxuries is the method of controlling production directly and of giving priority to those demands which represent the most urgent social necessities. Builders of ordinary houses may be unable to get the materials because priority is being given to the needs of military cantonments and the housing of quasi-mobilized armies of munitions workers, while steel is being taken for guns, ammunition, and ships, and structural forms so adapted that makers of building material can themselves turn to ship building. Perhaps the most far-reaching single agency of all for this purpose is our transportation system; and the shipment of foodstuffs before luxuries and things of immediate need before things of a postponable character is, among other things, one of the most effective means of assisting in the safeguarding of the social minimum.

It is impossible now to predict how much will survive of the war policy directed to this end. The more extreme forms of interference with personal liberty certainly will not at once become permanent parts of our life. On the other hand, those forms of direct public service which help to secure the social minimum without obvious interference with personal liberty will, beyond a doubt, be much stimulated. Of control through the producers themselves, there may well remain some system by which trade associations are recognized as performing a number of quasi-public functions in voluntary coöperation with government bureaus in policies looking, not merely to the elimination of waste in production itself, but toward the checking of trade practices which make for waste on the part of the consumer and the stimulating

of trade practices which tend to urge the consumer in the direction of economy.

6. *Advertising vs. Social Guidance*

The consumer certainly needs the service which at present he gets through the channels of advertising: namely, the guidance of purchase under a system in which purchase is the guide of all economic effort. He needs to have goods and services brought to his attention in an enlightening way and to be informed of their good and bad points so that he may spend his money wisely. But when one stops to think of the various things the government is now doing, one cannot fail to realize that it is rapidly furnishing a set of agencies for economic guidance: that is, for doing just the thing that advertising does, though on a wholly different basis and much more economically. Its campaign for the enlistment of housewives in an intelligent use of food, its testing bureaus, its systems of priority, of price fixing, and ultimately, perhaps, of general control of consumption, are virtually paralleling the social service of advertising in this field with a service which is not exactly its equivalent, but is better adapted to war-time conditions. The corollary is sufficiently obvious.

Perhaps advertising will shrink automatically as businesses feel the pinch of diminished demand and increased cost and find their market, under the stress of war conditions, suddenly becoming unresponsive to the ordinary tactics of salesmanship. Or, perhaps some less far-sighted producers may, for a time, spend more than usual on advertising in order to strengthen the dwindling demand, utilize the unused capacity of their plants, and come as near as possible to preserving "business as usual." It remains to be seen. Should we, in a society forced to sharp economy, maintain private advertising and salesmanship on the ordinary peace-time scale to which America is accustomed, while the government is itself guiding industry directly and at great expense? Such a duplication would seem to be little short of criminal wastefulness.

This state of things will not be permanent, but it should have some effects of permanent value. The government can exercise economic guidance at present because it does not have to ask first "Does the consumer want this service rendered?" but can confine itself chiefly to the question "Will this commodity render the service better than any other?" When more normal times come we can afford again to pay more attention to the question of

what kinds of services the consumer wants; and the unstandardized methods of advertising may again become suited to this state of things. But meanwhile there will have been a wholesome object lesson in the value of disinterested information such as comes through public or coöperative channels, and if it shall happen that the work of advertising and salesmanship of the private sort is cut down during the war to a fraction of its present amount, we shall have had another wholesome object lesson in the discovery that little of any substantial value to consumers or to producers in general has been lost. The result may well be a determination, possibly exercised through the channels of trade associations in co-operation with the government, or possibly in other ways, to practice in the future a mutual limitation of armament in advertising warfare which will lessen the waste without sacrificing any valuable services that are now being rendered.

7. Control of the Rewards of Industry

Free contract as a method of mobilizing industry is best adapted to certain conditions which are, for the most part, fairly well realized in times of peace. To discover in what direction the social will is going to move industrial effort we wait for the social will to express itself through demand in the market. The changes that are continually going on are not so large as to be revolutionary, at least for large industries. Under such conditions, the individual has, in the first place, a fair chance to take care of himself in spite of the shifting environment, so that those who come to grief are a minority. In the second place, since the changes are comparatively gradual, they do not revolutionize rates of wages or the rates of return to industrial capital. Indeed, the traditional economic theory goes on the assumption that an inducement, however small, will attract labor and capital from any part of the market to any other part.

In time of war the movements called for are so huge in quantity and the demand for speed so urgent, that if it were left to the incentives of increased prices and increased wages to bring about these changes, this could only be done at a huge increase in the returns to labor and capital, with the result that, as we have already seen, the increased purchasing power in the hands of those who are in the growing industries is used virtually to bid against society. In such a dilemma the motives of patriotism and the machinery of direct public control can come to the rescue, and

one of the most pertinent solutions is the enlistment, voluntary if possible, of those engaged in industries which serve the purposes of the war and of others who can thus be diverted into those industries.

This does not mean starvation wages, but it does mean that wages in general would be governed by the amount necessary to maintain efficient service, health and reasonable happiness, rather than by the scarcity premium put upon a certain grade of labor by a sudden increase in demand. The bottom fact is that we are faced with the task of working out a collective efficiency-wage system instead of a competitive efficiency-wage system, and to make an intelligent beginning we must get rid of all preconceptions as to whether the two do or do not necessarily correspond.

The collective efficiency-wage is the wage necessary to enable and stimulate an output of efficiency: the competitive efficiency-wage is the wage necessary to get and hold efficiency in one particular spot, against the inducements offered elsewhere. Where war results in denying the workman full freedom to leave his job, as has been the case in England, it is plain that the competitive principle is no longer in full force. The competitive system has a strong tendency to make differences in pay equal to differences in the exchange value of the product. On the other hand, while the collective system requires that superior work shall earn superior pay, there is no exact equality needed between the differences in output and in pay, and the price measure is not to be accepted as an adequate test of superiority in output, for reasons some of which have already been dealt with.

The lowest wage paid is higher under the collective than under the competitive principle, for the collective loss of efficiency due to low wages does not fall in its full extent on the employer who is responsible, being partly neutralized so far as his pocket is concerned by the low wages themselves, and partly diffused by the shifting movements of the laboring population from employer to employer and from industry to industry. The loss from overlong hours is similarly distributed. The collective way of estimating efficiency is by the output per unit of human raw material utilized. The competitive way of estimating it is by the output per dollar expended, and there may be as much gain in paring the reward of the laborers to the competitive minimum as in lessening the amount of labor power that is needed to accomplish a given task. Yet one method may lessen collective efficiency if carried far, and the other increase it.

The piece wage of competitive efficiency is a progressive rate, since the faster workman reduces the overhead cost per unit of product. At flat piece rates, slow workers are relatively unprofitable. The collective system, on the other hand, may call for a regressive piece rate in order to prevent the laborer from overworking in the effort to earn the exaggerated premium that is offered. The present system is a combination of both principles. In complex industry it is impossible to calculate the exact economic worth of all differences in performance, and the most mathematically ingenious system of differential wages merely undertakes to see that each element of superior efficiency commands some corresponding premium.² The pure competitive forces are further modified, partly by regulation, and partly by the increasing realization on the part of employers of the wastefulness of a large turnover of labor, which causes them to treat their relationship with labor more and more as one of stable status, with mutual responsibilities looking to the future and determined by this status rather than by the letter of the contract. In this respect evolution is reversing the sociologic dogma, and this reversal is in the line of progress for the future, as far ahead as the future is worth trying to predict and to plan. The war will thus stimulate a movement which is destined to be a continuing feature of our economic life.

The difference between the collective and the competitive supply-price of efficient labor is, however, only one phase of a broader one involving all the factors of industry. Society is getting a chance to test its power as a monopoly buyer of all these factors, for if it is willing to exercise the necessary force it can free itself from the need of paying capitalists and owners of natural resources the exchange value which these factors would have in competitive industry. It need not pay for shipbuilding capital enough to attract it away from building houses, and it may not prove to be necessary even to pay the price that would be required to stimulate a given amount of saving in ordinary times, for it can control not merely the rival opportunities in different fields of investment but also the outlets for spending surplus income.

The principle of priority for necessities, applied by boards

² Mr. G. D. Babcock, in *Industrial Management*, January, 1917, page 539, sets forth an extremely complex formula of this character which has been successfully used.

which have power enough to decide the destination of all the elementary raw materials, cannot fail to reduce the supply of luxuries, while the control of prices would prevent the producers from absorbing as much of their customers' income as before out of a lessened volume of business. If pleasure automobiles or gasoline to use in them for pleasure trips, or similar luxuries, are not to be had, more money will be saved at the same rate of reward. This represents a genuine condition on the other side of the Atlantic, and until our own country approximates this condition we may well feel that we have not yet begun to fight, financially. Through such virtually enforced saving society may be able to get a given supply of saving cheaper than the "normal" supply-price for that amount. In a word, we have the opportunity of testing to what extent the powers of society as a monopoly buyer exceed the powers of its members as competitive buyers, and to what extent supplies may be forthcoming on better terms to society than to its members.

8. Conclusion

This paper proposes that government shall help employers to be more efficient producers of goods for society's uses, and it is one of the greatest absurdities of the present industrial situation that proposals looking to this end should need defense. The feeling that government must not help industry because it must not help the wicked capitalist, is essentially a doctrine of political sabotage. Far from being true, there is every probability that without a more developed policy of assistance to industry, the attempts to restrain the wicked capitalist can never be thoroughly successful. A government cooperating with business could command in turn an attitude of responsibility which would have back of it the sense of fair play that is so dominant a force in business ethics. And in this way the most elastic and vigilant of all sanctions could probably be brought into play in support of the demands of government for conduct which shall serve the public in ways not covered by the obvious mutual give and take of equals on which the traditional morals of business seem so largely to rest.

Perhaps it is not worth while at present to speculate much upon the precise form of organization in which the ideal condition may be embodied, and the election of a business entrepreneur by those who deal with him may be recognized for what it is—an election to an important public office by a method which sifts out ineffi-

ciency far more certainly than do the political primary and the ballot. But no solution can be worthy of the name if it is so weak as to be afraid to render assistance to business where public or collective action is needed to make business truly efficient. In the matter of regulation, it is safe to say that the existence of objective standards by which to judge the things society wants, as distinct from the subjective standard of price, tends to make an increased degree of social control tolerable and wieldable by furnishing a considerable safeguard against the danger of degenerating into tyranny or log-rolling. Lest the writer be guilty of preaching a dangerously naïve optimism, he hastens to add that not everything that calls itself a scientific or objective standard merits the name, and that genuinely objective standards are difficult and laborious to achieve. F. W. Taylor believed that the standardizing processes of scientific management would be a solvent for individualistic strife in industry, but his expectations have hardly been justified. However, the system may have more possibilities in the hands of an organization somewhat more democratic than the present management of industry. What has been said may be taken as indicating the direction in which standardization tends, rather than the extent to which it will go.

Without science only despotism can be coherently organized. With science at its disposal, democracy has at least a chance. There are some who seem to hope that "making the world safe for democracy" means relieving democracy of the need of achieving an efficiency approaching that of autocracy.³ If there is any danger of this hope being realized, it is of the utmost importance to search for all possible antidotes, and to hold fast all the lessons the war can teach us as to the means of permanently increasing the efficiency of communities in getting what they, as communities, desire.

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³ See especially Mr. Fabian Franklin in the *Atlantic Monthly*, August, 1917, p. 276.

THE WAR REVENUE ACT OF 1917

October 3, 1913, President Wilson signed his first important revenue measure, the Underwood Tariff bill. Exactly four years later, October 3, 1917, he signed the greatest War Revenue bill yet enacted. The former was designed to raise annually about three quarters of a billion dollars for ordinary purposes. The latter is designed to raise annually over two and one half billion dollars exclusively for war purposes, that is, over and above ordinary revenues. The former bill in the first year brought in nearly \$300,000,000 from customs, a slightly greater amount from ordinary internal revenues, and only \$71,000,000 from the new income tax. The greatly increased importance of this new tax in the recent law is very significant. The latest bill, which is superimposed upon the ordinary revenue measure, is designed to get nothing worth mentioning from customs, but \$850,000,000 from the war income tax, and \$1,000,000,000 from its brother, the war profits tax. The amended revenue bill of September 8, 1916, as further amended March 3, 1917, was expected to increase the annual revenues from three quarters of a billion to a billion dollars or more, the increase being for preparedness. This latter revenue law and the new war revenue act together are expected to yield three and a half to three and three quarter billion dollars, or about five times as much as our federal taxes before the war.

This increase is immense. It would just about pay, in a single year, the total of our national debt at the end of the Civil War, or it would pay nearly three times our national debt at the time we entered this war last April. But gigantic as this increase is, it only begins to provide for the appropriations and authorizations of over \$21,000,000,000 which have already been made for the current fiscal year ending June 30, 1918.

Soon after Congress met last April, the Ways and Means Committee took up the matter of revenue for war purposes. A very hastily considered bill was passed by the House of Representatives on May 23. The Senate Finance Committee, and later the Senate itself, took up the matter more carefully and deliberately and passed a much amended bill on September 10. The conference committee labored for two weeks or more but its report was adopted promptly by both houses with very little dissent and became law October 3, as mentioned.

The House bill was estimated to yield about \$1,800,000,000

and the prevailing sentiment in the Senate indicated a reduction to \$1,500,000,000, or less. But during the consideration of the bill, Secretary McAdoo's estimates of war needs grew rapidly and, under the pressure of these greater needs, the Senate passed a bill estimated to yield \$2,400,000,000. This was slightly increased by the conference committee. The following table gives the estimated revenue from the House, Senate, and the enacted bills, respectively.

TABLE 1.—ESTIMATED REVENUE FROM THE SEVERAL BILLS.

	House Bill	Senate Bill	Enacted Bill
	(Millions)	(Millions)	(Millions)
Incomes, individual and corporate	\$598.7		\$851.0
War tax on 1916 incomes.....	108.0		.....
Excess profits	200.0	1,060.0	1,000.0
Spirits, liquors, wines.....	151.0	207.0	193.0
Soft drinks, syrups, etc.....	20.0	11.0	13.0
Tobacco and manufactures|			
thereof	68.2	56.6	63.4
Freight transportation	77.5	77.5	77.5
Express transportation	15.0	18.0	10.8
Passenger transportation ...	75.0	37.5	60.0
Pipe lines	4.5	4.5	4.5
Seats and berths.....	.7	2.2	4.5
Electric lights, gas, telephone|			
service	30.0		
Telegraph and telephone mes-|			
sages	7.0	7.0	7.0
Insurance	5.0		5.0
Automobiles	68.0	41.0	40.0
Tires and tubes.....	12.5		.....
Musical instruments, etc.....	7.0		3.0
Motion picture films.....	7.0		3.0
Jewelry	7.5		4.5
Sporting goods	2.0	.8	1.2
Pleasure boats .....	.5	.5	.5
Perfumes and cosmetics.....	4.7	1.9	1.9
Proprietary medicines.....	8.5	3.4	3.4
Chewing gum	1.0	.....	.4
Cameras .....	.....	.5	.7
Admissions	60.0	18.0	50.0
Club dues	1.5		1.5
Stamp taxes, etc.....	33.0	22.0	9.0
Estate taxes	6.0		5.0
Customs duties	200.0		.....
First-class mail matter.....	70.0		70.0
Second-class mail matter.....	19.0		6.0
Munition manufacturer's tax..			25.0
Totals	\$1,868.8	\$2,411.6	

The hardest fought controversies between the two houses were

over the war profits tax and the taxes on second-class mail matter. Other important differences which were not so strenuously contested were over taxes on customs, inheritances, automobiles, holding companies, and undistributed surpluses. But the fundamental controversy throughout was not the one between the two houses but the one between different members in each house; namely, the relative amount of the total war expenditures that should be raised by taxation; and its corollary, the amount of taxes that should be levied upon large incomes and wealth. The minority report of the Senate Finance Committee was devoted almost exclusively to this issue. These controversies and the more important new features of the bill will be taken up somewhat more in detail under the treatment of the several sections or titles below.

The bill as passed is composed of thirteen so-called "titles" as follows:

- I—War Income Tax.
- II—War Excess Profits Tax.
- III—War Tax on Beverages.
- IV—War Tax on Cigars, Tobacco and Manufactures thereof.
- V—War Tax on Facilities Furnished by Public Utilities and Insurance.
- VI—War Excise Taxes.
- VII—War Tax on Admissions.
- VIII—War Stamp Taxes.
- IX—War Estate Tax.
- X—Administrative Provisions.
- XI—Postage Rates.
- XII—Income Tax Amendments.
- XIII—General Provisions.

It should be kept in mind throughout the discussion of all the titles that the War Revenue act of 1917 treats the Revenue act of September 8, 1916,¹ as a basic law and that, with the exception of Title XII, Income Tax Amendments, and some minor matters, this new act leaves the basic act intact and levies extra taxes for war purposes. For example, Title I, War Income Tax, levies a war "normal" tax of 2 per cent on the incomes of individuals and 4 per cent on the incomes of corporations. These taxes are not in place of, but in addition to, the 2 per cent "normal" tax on both individuals and corporations as provided for in the act of September 8, 1916. Furthermore, the reduction of the individual exemptions of \$3,000 for unmarried persons and \$4,000 for heads

¹ Discussed in the December, 1916, issue of this REVIEW, pp. 837-850.

of families to \$1,000 and \$2,000, respectively, does not apply to the income tax of the 1916 law but only to the war income tax of the 1917 law.

There are enough exceptions to the general rule stated above, however, to make it rather confusing for the layman, and even to the initiated, to discover just what is the sum total of all taxes in many specific cases. This condition of affairs and ambiguities inherent in the nature of several matters, particularly in the definition of capital under the war excess profits title, make it very difficult to give a clear-cut and adequate presentation of the act, and they seem to leave also many opportunities for misunderstandings and even for litigation.

In addition to the war "normal" income taxes, Title I imposes also war "additional" income taxes, or surtaxes, upon the incomes of individuals (not of corporations) as indicated in the following table:

TABLE 2.—"ADDITIONAL INCOME TAXES."

Part of income to which applicable (in thousands of dollars)			Tax, per cent
1913 law (original law; now superseded)	1916 law (still in effect)	1917 law (superimposed under 1916 law)	
\$20— 50	\$20— 40	\$5— 7	1
50— 75	40— 60	7— 10	2
75—100	60— 80	10— 12	3
100—250	80— 100	12— 15	4
250—500	100— 150	15— 20	5
500—any excess	150— 200		6
	200— 250	20— 40	7
	250— 300		8
	300— 500		9
	500—1,000	40— 60	10
	1,000—1,500		11
	1,500—2,000		12
	2,000—any excess		13
		60— 80	14
		80— 100	18
		100— 150	22
		150— 200	25
		200— 250	30
		250— 300	34
		300— 500	37
		500— 750	40
		750—1,000	45
		1,000—any excess	50

The recent act provides for the collection at the source of only one 2 per cent normal income tax (either that of the act of 1916

or that of the act of 1917, apparently not both) and, so far as the war income tax upon corporations is concerned, it does away with the multiple taxation of holding companies. It will be observed in Table 1 above that the bill as passed by the Senate and as finally enacted, omitted the retroactive income tax upon 1916 incomes as provided for in the House bill, and applies to 1917 and later incomes only. This feature of the House bill was unjustifiable, if not defenseless.

The War Excess Profits Tax, Title II, may be considered an extreme expansion of the Munition Manufacturer's Tax, Title III of the 1916 act; or, more properly, perhaps, of Title II of the act of March 3, 1917. The new act, however, reduces the old tax from $12\frac{1}{2}$ per cent to 10 per cent for 1917 and discontinues it after December 31 of this year. As mentioned above, it was over the war excess profits tax that one of the principal contests between the two houses was fought. The House proposed to allow a deduction of 8 per cent upon capital invested as a normal income and to tax the income in excess of this deduction at a flat rate of 8 per cent. This is the provision of Title II of the act of March 3, 1917, which is repealed by the act of October 3, 1917. The Senate spokesmen² said that it was impracticable to ascertain the "capital invested" because of the difficulties connected with watered stock, the value of franchises, good-will, and other intangible assets. They claimed that it would be fairer and more feasible to ascertain war excess profits by deducting the average profits of the "pre-war period" (1911, 1912, and 1913) from 1917 and later profits. Allowances were to be made for exceptional cases. The data for such computations were already at hand in the returns for the corporation and income taxes for the respective years. The Senate adopted, furthermore, not an 8 per cent flat tax, but a graduated tax of from 12 to 60 per cent upon the excess. They called especial attention to the fact that the railroads would be almost entirely exempt under the House bill because the average returns upon their capital are less than 5 per cent; also, that the corporations making huge profits would not pay nearly such heavy taxes under the House measure as under the Senate bill. It will be noted in Table

² See, however, opposite attitudes of Senators Underwood and Bankhead in speeches of August 30 and August 16 respectively, *Congressional Record*, p. 7120 *et passim*.

1 above that this title of the House bill was estimated to yield less than one fifth that of the Senate bill.

The enacted law was a compromise. To arrive at taxable excess profits, there shall be deducted the average rate of profits upon current invested capital that was earned upon invested capital in the pre-war period (1911-1912-1913), provided this rate falls between 7 per cent and 9 per cent. In any case, there shall be a minimum deduction of 7 per cent. The maximum deduction is 9 per cent, if the latter amount or more was earned in the pre-war period. On the excess above the allowable deduction the following excess profits tax rates apply:

TABLE 3.—WAR EXCESS PROFITS TAXES.

On portions of net income from invested capital between: (<i>Per cent</i>)	Rate of tax (<i>Per cent</i>)
Deduction ¹ and 15	20
15 and 20.....	25
20 and 25.....	35
25 and 33.....	45
33 and above.....	60

¹ This deduction varies from 7 to 9 per cent, according to the rate of pre-war profits, as explained in the text above.

These rates apply to the excess profits, not only of corporations but also of partnerships and individuals, though corporations are allowed only a maximum deduction of \$3,000 besides that mentioned above, while partnerships and individuals are allowed \$6,000. The compensation of government officials and employees, federal, state, and local, is exempt from this tax. Exceptional cases are to be given special consideration by the Commissioner of Internal Revenue and are to have their deductions based upon the deductions of "representative" corporations, partnerships, or individuals engaged in like or similar trades or businesses.

"Invested capital" as used in this title means: (1) actual cash paid in, (2) cash value of tangible property paid for stock at time of such payment, (3) paid in or earned surplus and undivided profits at the beginning of the taxable year. Included as invested capital are the actual cash value of patents and copyrights paid for stock or shares and the bona fide cash or tangible property payments for good-will, trademarks and franchises. There are some qualifications and some differentiations between individuals, on the one hand, and corporations and partnerships on the other.

The following quoted sections show how some difficult and exceptional cases are to be handled:

Sec. 209. In the case of a trade or business having no invested capital or not more than a nominal capital there shall be levied, assessed, collected, and paid, in addition to the taxes under existing law and under this act, in lieu of the tax imposed by section two hundred and one, a tax equivalent to eight per centum of the net income of such trade or business, in excess of the following deductions: In the case of a domestic corporation, \$3,000, and in the case of a domestic partnership, or a citizen or resident of the United States, \$6,000, in the case of all other trades or business, no deduction.

Sec. 210. If the Secretary of the Treasury is unable in any case satisfactorily to determine the invested capital, the amount of the deduction shall be the sum of (1) an amount equal to the same proportion of the net income of the trade or business received during the taxable year as the proportion which the average deduction (determined in the same manner as provided in section two hundred and three, without including the \$3,000 or \$6,000 therein referred to) for the same calendar year of representative corporations, partnerships, and individuals, engaged in a like or similar trade or business, bears to the total net income of the trade or business received by such corporations, partnerships and individuals, plus (2) in the case of a domestic corporation \$3,000, and in the case of a domestic partnership or a citizen or resident of the United States, \$6,000.

For the purpose of this section the proportion between the deduction and the net income in each trade or business shall be determined by the Commissioner of Internal Revenue in accordance with regulations prescribed by him, with the approval of the Secretary of the Treasury.

From the above it will be seen that the Commissioner of Internal Revenue and the Secretary of the Treasury have very great discretionary powers; and, if these powers are upheld, they may determine somewhat arbitrarily and summarily, if need be, the "invested capital" of and, consequently, the amount of war excess profits tax due from, any individual, partnership, or corporation. These discretionary powers may prevent much litigation, and yet, if used unwisely, may cause much friction and antagonism to the law. Much the same might be said as to the extent and use of the powers of these same officials in regard to the taxes of the other titles of this act, but the maximum appears to be reached in this title.

Title III, War Tax on Beverages, increases the existing tax on distilled spirits that are in bond or that are produced or imported by \$1.10 per gallon, or if withdrawn for beverage purposes by \$2.10 per gallon. To quote a local paper, this means that the tax on whiskey jumped from \$1.10 to \$3.20 per gallon from October 3 to the next day, October 4, and that a case which

formerly sold for \$3 must now bring \$8. Popular drinks at local cafés were reported to have been raised immediately from five to ten cents each. Retailers are allowed an exemption upon 50 gallons if in stock at passing of act. The tax on perfumes containing distilled spirits is also raised by \$1.10 per gallon, and the importation of distilled spirits, except from Porto Rico and the Philippines, is prohibited.

The existing tax of \$1.50 per gallon on beer is increased by a war tax of the same amount; the taxes upon still wines, grape, brandy, and wine spirits are doubled also.⁸

A graduated tax of from 5 to 20 cents per gallon is laid on syrups and extracts used in the manufacture of soft drinks, and most soft drinks themselves are taxed one cent per gallon.

The extra war taxes upon tobacco and manufactures thereof, Title IV, are graduated. On cigars not weighing more than three pounds per thousand, the tax is 25 cents per thousand; if weighing not more than three pounds per thousand and retailing from 4 to 7 cents each, the tax is \$1 per thousand. These taxes on cigars increase to a maximum of \$7 per thousand on those retailing at over 20 cents each. The war tax per thousand of cigarettes not weighing over three pounds is 80 cents and upon those heavier, \$1.20. The war tax on tobacco and snuff is 5 cents per pound.

The Senate raised the House rates on liquor but lowered the rates on tobacco, claiming that the latter rates were too high for maximum revenue yields. The finally enacted bill resulted in a compromise in each case.

Title V, War Tax on Facilities Furnished by Public Utilities and Insurance, reaches sources of revenue not levied upon in this fashion in the basic act of 1916. Receipts from freight transportation are taxed 3 per cent, and those from express 1 cent for each 20 cents or fraction thereof. The carriers are made collectors of the taxes, though the purchasers of the services are to pay them. Passenger transportation is taxed 8 per cent, though commutation and season tickets for less than 30 miles and fares of less than 35 cents are exempted. Amounts paid for seats, berths, and staterooms in parlor cars or on vessels are taxed 10 per cent. Telegraph, telephone, and radio messages for which the charge is 15 cents or more are taxed 5 cents each.

⁸ For the various rates, see bill; or "The New Revenue Act," *AMERICAN ECONOMIC REVIEW*, Dec., 1916, p. 845.

Insurance issued after October 31, is subject to the following taxes:

(a) Life insurance: 8 cents on each \$100, except that on industrial policies not in excess of \$500 the tax is 40 per cent of the first weekly premium.

(b) Marine, inland, and casualty insurance: 1 cent on each dollar of premium.

Reinsurance by other companies is exempt.

Under War Excise Taxes, Title VI, manufacturers and importers of the following are taxed 3 per cent on the price sold: automobiles, motor cycles, musical instruments, talking machines, jewelry, cameras, and most of the more popular sporting goods. Perfumes, cosmetics, proprietary medicines, chewing gum, et cetera, are taxed 2 per cent; moving picture films from one fourth to one half of a cent per linear foot. Graduated taxes are levied upon water-craft, also. In most cases, only half of the above rates apply to retailers' stocks on hand at the time of passage of this act.

The House bill imposed a 5 per cent tax upon the manufacturers and importers of automobiles and most other items taxed 3 per cent in the enacted bill, as mentioned in the preceding paragraph. The Senate bill substituted for the tax on the manufacturers and importers of automobiles and motor cycles an annual graduated tax upon the use, that is, upon the owner, of these vehicles. The Senate bill rates were: motor cycles, \$2.50; automobiles, the original listed retail price of which was not over \$500, \$5; \$500-\$750, \$7.50; \$750-\$1,000, \$10; and for each \$500 increase or fraction thereof up to \$3,000, \$5; above \$3,000, \$10 for each increase of \$500 in listed price. Each year, the tax on the owner was to decrease 10 per cent until 50 per cent was reached. The House tax on automobiles was estimated to bring in the most revenue the first year, but the Senate bill would probably have had as much or more effect in reducing the demand for cars and, if not, might have brought in more revenue if the bill remained in force several years.

The War Tax on Admissions and Dues, Title VII, is 1 cent for each 10 cents or fraction thereof to be paid by person paying for admission. It is provided, however, that the tax for children under twelve shall be 1 cent in every case where they are charged

admission; also, that pass holders, except bona fide employees and municipal officers upon official business, shall pay the same tax as those paying for admission. Five-cent admissions are exempt, as are ten-cent admissions within outdoor general amusement parks. Admissions, the proceeds of which inure exclusively to the benefit of religious, educational, or charitable institutions or organizations, and admissions to agricultural fairs, none of the profits of which are distributed to stockholders or members, are also exempt.

Dues and membership fees, including initiation fees, to social, athletic, and sporting clubs, where such fees or dues are in excess of \$12 per year, are subject to a tax of 10 per cent of such dues and fees. Fraternal beneficiary societies operating under the lodge system are exempt.

The taxes levied under this title are upon the several payers of admissions, dues, and fees, but they are to be collected by the recipients and to be reported monthly by the latter to the internal revenue collector. This is similar to the provisions for the payment and collection of most of the taxes under Titles III to VII of this act.

Some of the more important items of Title VIII, War Stamp Taxes, are as follows:

1. Bonds of indebtedness: 5 cents per \$100.
2. Bonds, indemnity and surety: 50 cents. When a premium is charged, 1 per cent of premium.
3. Capital stock, issue: 5 cents per share; or, if actual value exceeds \$100, 5 cents per \$100 of actual value.
4. Capital stock, sales or transfers: 2 cents instead of 5 cents as in 3 above.
5. Produce, sales of on exchange: 2 cents per \$100.
6. Drafts or checks payable otherwise than at sight or on demand, and promissory notes, 2 cents per \$100. (It will be noted that no tax is imposed upon ordinary bank checks payable at sight.)
7. Conveyance: deeds to realty, 50 cents for each \$500 or fraction thereof.
8. Custom house entries: 25 cents to \$1.
9. Entry for withdrawal from customs bonded warehouses: 50 cents.
10. Passage tickets to ports and places not in the United States, Canada, or Mexico: \$1 to \$5, depending upon cost of ticket; tickets costing \$10 or less, exempt.

11. Proxy: 10 cents.
12. Power of attorney: 25 cents.
13. Playing cards: 5 cents per pack of 54 cards.
14. Parcel-post packages: Upon every parcel transported within the United States on which the postage is 25 cents or more, a tax of 1 cent for each 25 cents or fractional part thereof.

Title IX, War Estate Tax. The estate or inheritance tax, a long-abandoned source of federal revenue, was reintroduced by the act of September 8, 1917.⁴ The rates of this act were increased 50 per cent by the preparedness act of March 3, 1917, to the amounts shown in the table below. The recent House bill superimposed upon the latter law a War Estate Tax which the Senate struck out but the main features of which the conference committee restored after making a few substantial reductions at both top and bottom. The Senators argued that it was best to reserve this source of revenue for the several states. Furthermore, the burden would fall unduly heavily upon the estates of those who happened to die during the period of this special war tax, and it would be especially unfair to those who died in patriotic service. The latter criticism was met by the conferees who exempted those dying while serving in the military or naval forces of the United States during the present war, or within one year after its close, if death results from injuries or disease contracted in such service.

TABLE 4.—FEDERAL ESTATE TAXES IN EFFECT OCTOBER 4, 1917.

On portion of net estate ¹ between	Law of March 3, 1917	Law of October 3, 1917	Total
	(Per cent)	(Per cent)	(Per cent)
0— \$50,000	1½	½	2
\$50,000— 150,000	3	1	4
150,000— 250,000	4½	1½	6
250,000— 450,000	6	2	8
450,000— 1,000,000	7½	2½	10
1,000,000— 2,000,000	9	3	12
2,000,000— 3,000,000	10½	3½	14
3,000,000— 4,000,000	12	4	16
4,000,000— 5,000,000	13½	4½	18
5,000,000— 8,000,000	15	5	20
8,000,000— 10,000,000	15	7	22
10,000,000—more	15	10	25

¹ An arbitrary deduction of \$50,000 is allowed to arrive at "net estate." The taxes here indicated are on the excesses above this deduction.

⁴ See December, 1916, issue of this REVIEW.

The House bill provided for a tariff which would have been not only a tax upon consumption, but also a source of endless confusion and difficulty. It provided for a flat increase of 10 per cent upon all existing duties and a 10 per cent duty upon all of the free list, with a few minor exceptions. As the Senate pointed out, this would have meant a combination of both specific and ad valorem duties upon all existing specific tariff dutied items. The House proposed also an excise tax on stocks of tea and coffee already in the United States.

The Senate Finance Committee struck out the tariff provisions of the House bill but substituted a "war excise tax" on stocks, importations, and domestic production of coffee, tea, cocoa, and sugar. But neither the Senate nor the conference committee upheld any of these tariffs or excises.⁵ The House proposal of a conscription tax upon electric light, gas, and telephone service met a similar fate.

Title XI, Postage Rates, increases the rates on letters, except drop letters, to 3 cents per ounce, and on postal and post cards to 2 cents each.

The increased rates upon second-class matter precipitated one of the biggest contests connected with the bill. The House bill proposed that the zone system, already applicable to the parcels post, should apply to second-class mail also; and provided for rates for the several zones of from $1\frac{1}{6}$ to $4\frac{1}{3}$ cents per pound beginning November 1, 1917; and provided further that these should be increased March 1, 1918, to $1\frac{1}{2}$ to 6 cents. The periodicals of the country were not slow to put up a fight, many of them claiming, and probably with truth, that such rates would bankrupt them, especially in view of already high costs of paper and other printing materials. Nor was it to be expected that the interests of these papers would not appeal to a sufficient number of congressmen and senators to represent them in both houses.

The Senate struck out the zone system with its high rates and raised the existing flat rate of 1 cent an ounce to $1\frac{1}{4}$ cents. The conferees rewrote the whole section, adopting the House suggestion of a zone system for the advertising portions of second-class mail matter but increased flat rates for other portions. The rates finally adopted were as follows: (a) On the portion of publica-

⁵ The "harmony" speech of Senator Boies Penrose in this connection is of interest to those who wish to estimate the present position of the old stand-pat protectionists. Senate speech of August 13, 1917.

tions devoted to matter other than advertising, $1\frac{1}{4}$ cents per pound beginning July 1, 1918, and $1\frac{1}{2}$ cents beginning July 1, 1919. If the space for advertising does not exceed 5 per cent of the total space it takes the same rate as other matter. (b) On the portion devoted to advertising, the rates for the eight zones of the parcels post system, beginning July 1, 1918, are $1\frac{1}{4}$, $1\frac{1}{4}$, $1\frac{1}{2}$, 2, $2\frac{1}{4}$, $2\frac{1}{2}$, 3, and $3\frac{1}{4}$ cents, respectively. Beginning July 1, 1919, they are $1\frac{1}{2}$, $1\frac{1}{2}$, 2, 3, $3\frac{1}{2}$, 4, 5, and $5\frac{1}{2}$ cents, respectively. Beginning July 1, 1920, they are $1\frac{3}{4}$, $1\frac{3}{4}$, $2\frac{1}{2}$, 4, $4\frac{3}{4}$, $5\frac{1}{2}$, 7, and $7\frac{3}{4}$ cents, respectively. Beginning July 1, 1921, and thereafter they are, 2, 2, 3, 5, 6, 7, 9, and 10 cents, respectively. Rates upon daily papers deposited in a letter carrier office for delivery by carriers, and the free circulation of second-class mail matter within the county of publication are left unchanged.

Periodicals entitled to be entered as second-class mail matter and maintained by and in the interests of religious, educational, agricultural, labor, fraternal, and similar organizations, none of the net income of which goes to any private stockholder or individual, are given the following flat rates: $1\frac{1}{8}$ cents per pound beginning July 1, 1918, and $1\frac{1}{4}$ cents beginning July 1, 1919.

The above rates are for publishers, their agents, and news-dealers. For others mailing second-class matter, the existing flat rate of 1 cent for 4 ounces, or fraction thereof, is continued. The Postmaster General is required to turn in to the general fund of the Treasury each month the estimated excess of receipts due to the revision of postage rates under this title. It is further provided that salaries of postmasters of offices of the first, second, and third classes shall not be increased after July 1, 1917, during the present war, and that the compensation of postmasters of fourth-class offices shall be computed on the basis of the rates of postage in effect prior to the enactment of this law.

Title XII, Income Tax Amendments. It will be recalled^a that Title I of the act of September 8, 1916, was an entire rewriting of the original income tax section of the act of October 3, 1913 (Underwood bill). Title XII of the recent act consists of miscellaneous amendments to Title I of the 1916 act, the most important of which will be discussed below.

Information-at-the-source is substituted for collection-at-the-source except in the cases of (a) interest on coupon bonds and

^a See December, 1916, issue of this REVIEW.

(b) incomes derived by non-resident aliens from American sources. One section apparently provides that any 1917 income tax already withheld at the source shall be returned to the individual, though local trust companies are advising withholding agents to wait for a ruling by the Secretary of the Treasury upon this point.

The Commissioner of Internal Revenue and the Secretary of the Treasury had urged the change to information-at-the-source before Senator Simmons, chairman of the Finance Committee, and other senators and congressmen took up its advocacy. Of the \$360,000,000 income tax collected last year, Senator Simmons stated that less than \$9,000,000 was collected at the source.⁷

The Secretary of the Treasury in his recommendation of the change, said:

I desire very earnestly to impress upon those charged with the enactment of income-tax legislation that it is the department's judgment, based upon a close observation and study of the practical workings of the "withholding" feature of the income-tax law, as well as the general requirements of administration, that "information at the source" is a foundation upon which the administrative structure must be built if the income-tax law is to be rendered most effective, and if due regard is to be paid to economy and simplicity of administration and to the imposition of no greater burden and expense upon tax payers than is necessary for effective administration.

A very large proportion of all claims for refunds under the income tax (approximately 80 per cent) arise out of excessive and erroneous withholding at the source. As the average cost of adjusting a claim for refund is \$10, a very considerable economy will result from doing away with the expenses incident to withholding at the source.

This change will relieve many withholding agents of much annoyance and expense, it will allow the taxpayer longer use of his money, and relieve him of the risk of insolvency of the withholding agent.

In many sections of the income tax title, amendments are inserted to provide for the levying of the extra war taxes and, possibly of other taxes, upon future issues of United States bonds and similar federal obligations. One amendment makes United States certificates of indebtedness and ordinary bank checks receivable for taxes.

Another amendment, applicable to both 1916 and 1917 income taxes, provides for the exemption of gifts for charitable, religious, educational, and scientific purposes, to the extent of 15 per cent of the payer's taxable net income.

⁷ Senate speech of August 10, 1917.

Besides the exemption for heads of families, an additional exemption of \$200 is made for each dependent child under eighteen years of age.

A very ambiguous amendment provides for a tax of 10 per cent on corporation surpluses remaining undistributed six months after the close of the year. It is then provided that:

The tax imposed by this subdivision shall not apply to that portion of such undistributed net income which is actually invested and employed in the business or is retained for employment in the reasonable requirements of the business or is invested in obligations of the United States issued after September 1st, 1917: Provided, That if the Secretary of the Treasury ascertains and finds that any portion of such amount so retained at any time for employment in the business is not so employed or is not reasonably required in the business, a tax of fifteen per centum shall be levied, assessed, collected, and paid thereon.

It is possible that the contradictory language of the text means to provide for a penalty of 5 per cent if the improper retention is concealed and later discovered by the Secretary of the Treasury.

Excess profits taxes of the recent law are allowed as a deduction in arriving at taxable net income subject to the ordinary (1916) income tax, and presumably this applies to the war income tax also.

Income from American securities owned by foreign governments is not subject to the ordinary income tax and presumably not to the war income tax either.

There are several other ambiguities, among them the question of whether or not the income tax is applicable to the salary of the President of the United States for his present term and to the salaries of federal judges who have taken office since the passage of the original income tax of October 3, 1913. The answer turns on the significance of the word "present" in an amendment which repeats the text of a former law in all particulars except one which is relatively unimportant and not closely related to the matter in question. Originally it meant 1913. Does its repetition to amend a section by including a clause about another matter in the latest law make it mean 1917?

As indicated above these miscellaneous amendments of Title XII apply only to the ordinary (1916) income tax and not to the extraordinary taxes of the most recent revenue act, except by cross reference in some cases.

The act of October 3, 1917, takes effect on the day following

its passage, unless otherwise specially provided therein. The following exceptions to this general rule are specially provided for:

1. The collection of the 2 per cent war "normal" tax at the source is not effective, where effective at all, until January 1, 1918.

2. The taxes on cigars, tobacco, and manufactures thereof, Title IV, take effect thirty days after the passage of the act.

3. The taxes under Title V, War Taxes, on Facilities Furnished by Public Utilities and Insurance, are effective November 1, 1917, as are also the taxes on admissions and club dues and fees of Title VII.

4. The War Stamp Taxes, Title VIII, take effect December 1, 1917.

5. The new postage rates on first-class mail take effect thirty days after the passage of the act, and the second-class mail rates are changed on July 1 of each year from 1918 to 1922, inclusive.

Considering our historical precedents, both remote and recent, and the presuppositions of our senators and congressmen, as well as of their constituents, and especially the general lack of information regarding war financiering, the law as passed probably comes up to what we might reasonably have expected. But great as has been the increase in taxation provided for and heavy as will be the burdens thereof, the present writer does not believe the recent act provides for as large a proportion of the total war expenditures as would be wise if the people of the country, especially the business men, were psychologically prepared for such taxation. The reasons for this opinion have been discussed more at length elsewhere,⁸ but will be taken up very briefly a few paragraphs below.

The House bill had all the earmarks of the hasty consideration which was given it; but it did evince a willingness to meet an emergency promptly and to meet it in approximately full measure, according to the then-considered heavy demands of the administration. Although the Senate seemed disposed to reduce substantially the aggregate of the House levies, the rapidly growing estimates of war needs urged upon it by the Secretary of the Treasury resulted in its increasing the levies. Furthermore, the

⁸ "Effects of Taxes and Bonds in War Finance," *South Atlantic Quarterly*, vol. XVI, no. 3 (July, 1917), pp. 236-247. Also in a paper presented before the American Academy of Political and Social Science, Philadelphia, Nov. 2, 1917. There have been recently several papers and brochures on this subject by others than the present writer.

Senate, and especially its finance committee, is to be commended for the careful way in which it took up the consideration of the measure, and for the marked improvements and adjustments which it made.

Among these improvements which were adopted in the final enactment of the law were the elimination of the retroactive income tax provision, the very ill-considered tariff section and the consumption taxes on light, heat, and household telephone service. The present writer does not think that the Senate Finance Committee's proposed taxes on tea, coffee, cocoa, and sugar would have reached the best available sources of revenue, but they would not have been very bad, because they would have been some inducement to economy in the use of the semi-luxuries of tea and coffee, and it is not probable that they would have effected the retail price of sugar very much under the conditions of high profits which producers are now making, and under domestic prices which are at present controlled by European markets. This would be true even if price fixation were not attempted in this country. But these taxes were struck out by the Senate and not restored by the conferees.

The elimination of the estate tax by the Senate for the reasons given was probably wise in a bill raising no larger an amount than the one enacted. There are other better available sources. It is almost certain that this source will be called upon for heavier contributions, and, in all probability, properly so, if the war continues more than a year and greater taxation is necessary. But under present conditions, and with rates of other taxes as they are, the restoration of this section by the conferees, even with one good amendment, was not an improvement.

The conferees' compromise on second-class mail rates seems wiser than the proposal of either house. There is no reason why advertising, especially so much of the objectionable advertising, should be carried at a loss to the government. The same reasoning does not hold so clearly in the case of really educational reading matter. The writer wishes, however, that there were some practical method of differentiating between various classes of more or less popular reading matter, much of which may not be very bad, but which is of doubtful social utility and hence undeserving of public subsidy.

The House tax on automobiles, radically changed by the Senate, but restored with lower rates in the enacted bill, will probably

cause less friction and be easier of administration, as well as more productive, than the Senate's proposal, but the very annoyance which would have been caused each owner by the Senate's proposal would probably have had more effect in the reduction of the number of automobiles used. There is much hazy thinking on the part of most people who advocate taxation of automobiles, gasoline, etc., to induce economy. No doubt these taxes will have some effect in this direction and are better than nothing, but they are not drastic enough, and are not likely to be soon. There is probably no other industry in this country that can be converted to war purposes so easily as the automobile industry, nor one which is making such demands upon men and raw materials needed for the war and which is supplying utilities so large a proportion of which the public could easily dispense with in times that demand economy and sacrifice. It is surprising that the government has not before this commandeered its services. In the strain which this war will put upon us, the little taxation which we have put, or are likely to put, upon automobiles, gasoline, et cetera, is comparatively futile. The manufacture of pleasure cars and the use of gasoline for such should be prohibited. The same principle applies to a number of lesser industries. Significant action has already been taken in the matter of liquor manufacture; it might well go further. The limit is what the public will stand for. One of the largest problems before us is to educate the public to the real facts and necessities of the situation, so that it will willingly do those things that are for its own ultimate best interests.

But the biggest controversies in the passage of the revenue bill were not over the above-mentioned matters, but over the rates and bases of the war income and excess profits taxes. These are by far the most important taxes in the bill, being estimated to yield together about three fourths of the entire amount, as mentioned near the beginning of this paper. The House bill provided for extra, or war, "normal" income taxes of 2 per cent on both individual and corporate incomes; the Senate and also the conferees decided upon 4 per cent for corporations. This extra amount on corporations was justified by its sponsors by the fact that they are not subject to the war "additional" income taxes as are individuals. This differentiation ignores the fact that corporation dividends, when distributed to stockholders, become subject to both the ordinary (1916 law) and war (1917 law) "addi-

tional" income taxes. These stockholders, whether of large or small, of poor or prosperous, corporations, may themselves be of all varieties of financial conditions; they may be widows, moderately well-to-do persons, or millionaires.

Much criticism was made of the high rates of the war "additional" tax as adopted by the House, but the rapidly increasing needs while the bill was under consideration caused the Senate and the conferees to raise these rates and also to apply them to smaller incomes. These war "additional" rates begin at 1 per cent on amounts above \$5,000 (instead of above \$20,000 as in case of the ordinary—1916—"additional" tax), and increase to 50 per cent of the net income in excess of \$1,000,000. That is, the total federal income taxes, exclusive of war excess profits taxes, which are to be levied upon the excess above \$2,000,000 of net incomes of individuals, are: (1) the ordinary (1916) "normal" tax of 2 per cent, and (2) "additional" tax of 13 per cent plus (3) the war (1917) "normal" tax of 2 per cent and (4) "additional" tax of 50 per cent, a total of 67 per cent. (See Table 2 above.) These taxes are very high compared with what we or other countries have been used to and some doubt the possibility of administering them efficiently. But in this connection we may quote Professor T. S. Adams:

Personally I feel very modest about all this. Had I been told in August, 1914, that England would soon be levying a normal income tax of 25 per cent; progressive income taxes which carried the upper limit to 42 per cent; and excess profits taxes rising to 60 per cent or 80 per cent, I should have repudiated the whole proposal or program as revolutionary, and should have done it with much heat and certainty. The event has proved, however, that the common legislators of England were wiser than students like myself.*

While one of the fundamental struggles relative to the war "excess" profits tax was over the rates, the most difficult matter to decide properly was the basis of this tax, or rather, the basis of the exemption, or deduction, before the tax was to apply. The big objection to the flat rate exemption of 8 per cent of invested capital of the House bill was the difficulty of ascertaining accurately the real invested capital in each case. The Senate Finance Committee made much of the admittedly great administrative difficulties this would involve, besides pointing out that the railroads would then be allowed almost entire exemption. On the other

* From a letter of September 24, 1917, to Professor E. R. A. Seligman, chairman of a committee of which the writer is a member.

hand, the proponents of the House bill and of some amendments to the Senate Finance Committee's bill urged very strongly the injustice of the exemption of pre-war profits. It was charged that those business men who first sponsored this idea wanted the years 1914, 1915, and 1916 taken as the pre-war period. To make profits of this period, which in many instances were one hundred to one thousand per cent, the basis of exemption for all future years, would almost wholly exempt the enormous profits of many of our largest corporations and would be manifestly unfair. This was so obvious that the Finance Committee adopted the years 1911, 1912, and 1913 as the pre-war period. Specific cases were pointed out to show that this selection was unfair. For example, the automobile industry was very prosperous during those years, while the lumber industry was much depressed. If three previous years were taken, the reverse was true. As a result of this opposition, the Finance Committee proposed a minimum exemption of 6 per cent and a maximum of 10 per cent of the capital invested. Though it seemed to admit it reluctantly, this was an abandonment of its chief objection to the House basis. As noted above, the final enactment was an adoption of this compromise, with the maximum and minimum changed to 7 per cent and 9 per cent, respectively, and with the different steps or brackets of the graduated rates made to relate to certain percentages of the invested capital instead of to percentages of the exemption. It should be noted in this connection that the Senate adopted high graduated rates and really made this the fairest source of war revenue very productive in contrast with the House proposal to take the comparatively insignificant flat rate of 8 per cent which would have yielded only one fifth as much, according to the estimates.

The people of this country do not appreciate how fortunate, one might truly say how lucky, we are that our income tax law has been in force since 1913, so that we have had a little experience with it and some of the administrative machinery developed. Of course we are as fortunate or possibly even more fortunate in having adopted our federal reserve system the same year. It would be well if our tax machinery could have been developed over a longer period and more gradually, but we are much better prepared in this respect than we were at the beginning of the Civil War. We are not at all certain how the machinery is going to stand the strain put upon it, but we shall be extremely interested observers and well wishers.

But some one will ask, If you are uncertain as to how the tax machinery will stand the strain, why do you say above that you do not consider the levies of the new war revenue act heavy enough? The answer is that the people best able to pay taxes in this country are not yet psychologically prepared to pay what they should and that neither they nor the masses have yet grasped the enormity of the undertaking upon which we have entered. If they had, then they would be more nearly prepared to make the sacrifices required.

To carry out what we have undertaken, if this war lasts much longer, will force sacrifices little dreamed of as yet upon nearly all of us. Who of us realizes the significance of appropriations and authorizations of \$21,000,000,000 in the first year of our participation in the war? The expenditures of the European belligerents have risen rapidly each succeeding year; but \$21,000,000,000 is just about equal to the total expenditures of Great Britain in three years of war, and her expenditures have been the heaviest of any of the Allies.

But neither this fact nor the fact that the amount is twenty-fold our usual federal taxes brings home to us what it really means. In characteristic American style we boast of the greatest country on earth and complacently take it for granted that we can do anything. What difference does ten or a hundred billion make to us? Congress can make the appropriations and authorize the taxes and bond issues, and, while they may inconvenience us slightly, still they amount to very little for this nation. Most of this is true on paper, but we haven't gotten much farther than the paper as yet.

What is accepted by most economists as the most careful investigation of our total national income, that of Professor W. I. King, puts it at \$30,000,000,000 for 1910. Professor E. Dana Durand says:¹⁰

His estimate for 1910, which I have checked with some care, was in round numbers, \$30,000,000,000. In view of the increase of population, the speeding up of industry, and the inflation of the currency, it is probable that the present figure would be around \$40,000,000,000; it might possibly be \$45,000,000,000. Needless to say, the real income has not increased in such a ratio, but we are dealing with income expressed in terms of money.

¹⁰ *Financial Mobilization for War*. Papers presented at a joint conference of the Western Economic Society and the City Club of Chicago, June 21 and 22, 1917.

Out of this income our people have to live, of course. Only what they can do without can be devoted to war purposes. But if we are to raise what has already been appropriated, even if we could devote to war all that we have been investing in new capital, it is necessary that the average consumption of the nation shall be cut to two thirds or a half of what it has been. We have not seen any evidences that we are yet psychologically prepared to make such sacrifices.

But some unthinking person—and there are many of them in the United States—wanting to avoid the necessity of heavy taxation, says why not borrow what we need, unmindful of the fact that what we borrow must come out of the national income, that is, that it merely causes certain citizens, rather than others, to cut down consumption. At this writing we are in the beginning of the second Liberty Loan Campaign to raise \$3,000,000,000. Secretary McAdoo announces that we shall have to raise thirteen or fourteen billion dollars more before June 30 next. If the people of the country do not economize enough by cutting down their consumption of automobiles, liquor, tobacco, clothing, et cetera, to this extent, the only way this amount can be raised is by inflation. To avoid this inflation is one reason why we advocate heavier taxation and even the absolute prohibition of the making of many luxuries. The labor and materials devoted to them should be turned directly or indirectly to war needs, and in many cases, taxation does not effect this as rapidly as the present emergency requires. Even with heavy taxation, the recipients of many incomes will still demand luxuries.

I shall not here take the time and space to discuss the evils of inflation and how it bears down with crushing burden upon those with small and relatively fixed incomes. That has been treated at length elsewhere. Proper taxation forces economy and prevents excessive inflation. Theoretically, bonds may be sold without causing inflation, but practically I do not believe they can be on the scale that is now authorized. We should not let ourselves be misled or confused by the money medium. What the government must have ultimately is not money, but men and commodities. We must give up these things. The government must get command of them through funds secured by borrowing, or by taxing, or by both. In any case, we consumers have to do without them. The fundamental consideration in the controversy over bonds versus taxes is, Which causes the greatest and wisest economy?

Among persons of equal means, some are in a much better position to economize at this time than are others; hence, some borrowing is socially justifiable because it allows accommodation as between individuals. But the more important fact is that the man who lends the government money by buying a bond is less likely to cut down his consumption than if he pays the same amount in taxes. This for two reasons: first, because he doesn't feel so poor, since he expects to be paid back later with interest, and hence does not feel the necessity of economizing; and, second, because he can often borrow on the security of his bond, and hence really does not have to economize as he would if he had paid taxes of an equal amount. He forgets that he (or his heirs) may be taxed later to pay himself interest and principal which he will receive, though he may be successful in avoiding part of his just taxes then. To the extent that he doesn't cut down his consumption, others must do so the more.

This almost universal attempt to shirk the practice of economy as much as possible brings a pressure upon the banks which they cannot resist, and makes it necessary for them to be accommodating in order to help the government float bonds, or even to keep many men from bankruptcy. Much of the inflation of the past has been through the issue of paper money. No one now advocates this openly. But in condemning paper money some seem to overlook the fact that bank deposit inflation is just as effective and more subtle, and in our present stage of banking, the most natural thing imaginable. Despite the contentions of those who say that inflation is not a necessary accompaniment of large bond issues, all of our history and the recent and present experience of European countries indicate that it is almost inevitable. Because of the seriousness of this matter, the following quotation from Professor A. C. Miller, one of the members of the Federal Reserve Board, is given:

When the amendments which have just passed Congress, providing for a greater concentration of the gold holdings of the country in the federal reserve banks, become effective, the twelve federal reserve banks will have a normal credit-lending and note-issuing power in the aggregate of about \$2,000,000,000. Thus far, less than one-fourth of this power has been utilized in extending accommodation to the money markets of the country, whether through the member banks of the federal reserve system or otherwise through open-market operations. The system possesses, therefore, an untouched margin of lending power of some \$1,500,000,000. When it is recalled that a dollar

of reserve credit extended to a member bank by a federal reserve bank may multiply itself by fivefold or more in the lending power of the member bank, it is at once apparent that the banks composing the federal reserve system—member banks and federal reserve banks together—have a potential credit capacity for the borrowing community of some \$7,500,000,000. This is an enormous potential credit power. But it is important that we should recognize that such power has its dangers and temptations as well as its protective strength and reassurance. To the expansionist it opens alluring vistas of inflation. By its wise use, however, it is capable of becoming at critical times a factor of decisive importance in the credit operations which will have to be undertaken during the period of the war—a bed rock of strong and wise finance.

The danger of the loan policy is that, by deluding itself with a notion that it is putting the burden onto the future, it will, through resort to fatuous and easy expedients, put the burden both on the present and on the future. This will happen if the loan policy, failing to induce a commensurate increase in the savings fund of the nation, degenerates, through the abuse of banking credit, into inflation—raising prices against the great body of consumers as well as against the government, thus needlessly augmenting the public debt, and increasing the cost of living just as taxes would. The policy of financing war by loans, therefore, will be but a fragile and deceptive and costly support unless every dollar obtained by the government is matched by a dollar of spending power relinquished by the community—in other words, will fail and develop into inflation unless the dollars which are subscribed to the bonds of the government are real dollars, the result of real savings and of real retrenchment. The danger to be feared in undertaking to finance our war by credit is that sophistry and financial legerdemain may lead us to attempt to carry the operation through as an operation in banking finance instead of as an operation in saving and investment. The doctrine is already current in the country, with the sanction of some leading bankers, that our war cannot be financed except by credit expansion running to the limits of inflation. Being dealers in banking credit, they naturally take the view that the expansion of credit in question will properly have to be an inflation of banking credit; for this is the new and most recent form of inflation which the gigantic war in Europe has been bringing to the front as a device in war finance.¹¹

These are some of the reasons why I think that heavier taxation should be adopted; and why it is so urgent that the people be educated to see things as they really are, not as they seem to be when glimpsed through the confusing veil of the money medium.

¹¹ *Financial Mobilization for War*, pp. 140 and 145. Paper presented at a joint conference of the Western Economic Society and the City Club of Chicago, June 21 and 22, 1917.

If the taxation under the new revenue law is as heavy as can be administered efficiently now, we must educate ourselves to the real facts so that we shall be psychologically prepared to sacrifice more. Unfortunately, voluntary sacrifices are not likely to be sufficient in this great emergency; hence the desirability of drafting, so that the burden will be more equitably distributed and so that the war may be won at the least cost in lives and goods. The writer is heartily in sympathy with our part in this great war to "make the world safe for democracy," we could not keep out of it horrible as it is; but is it wise to weaken our own present fighting strength and to jeopardize our own democracy, when better methods will gain our ends much more effectively?

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CANADIAN WAR FINANCE

For over three years now Canada has been facing the task of financing the no small part it has assumed in the common war against autocracy. The sums involved may not appear great, as compared with the war budgets of Britain or France or the United States, but the record of her efforts has a distinct value and interest of its own, and not least so for the citizens of the great sister democracy. Broadly speaking, the experience of Canada has been identical with that of the other belligerents in the revelation the war has brought of the unsuspected powers of financial expansion a nation possesses. It has also its distinctive features, arising out of the industrial condition in which Canada found herself at the outbreak of the war, her traditional fiscal policy, and her peculiar financial and trade relations with the United Kingdom and the United States. The working of the budget system is also a point worth the consideration of the United States student of finance.

Before reviewing the course of war finance, some of the distinctive features of pre-war finance must be noted—the purposes of federal expenditure, its rapid expansion, and the sources of taxation and of loans.

Since the union of the provinces in 1867, the objects of federal expenditure have been much the same in Canada as in the United States. There were, however, some notable differences. Until 1911, the Dominion made no provision for a navy, and its pension roll was brief. On the other hand, Canadian governments have long considered it necessary to undertake or aid great national enterprises, to a degree unknown in the United States, in the endeavor to bind together by railway and canal the nine far-flung provinces which geography and the diplomats have done so much to sever. Another outlay not found in the United States was the subsidy paid the various provinces of the federal government, roughly on a population basis, in lieu of the customs revenues the provinces gave up on entering Confederation.

The growth alike of revenue and of expenditure was slow until nearly the end of the century. Then came the realization of the possibilities of the West, with the rush of immigrants, the multiplying of railways, the expansion of factories and the building of towns that followed. In the dozen crowded years of this growing time, the calls upon the government for expenditure increased

even faster than the population. The revenues, reflecting the growth of the imports required for all the tasks of a construction period, grew with almost equal swiftness, until in the year before the war, income and outgo were both more than three times as great as they had been in 1900. In the fifteen years from 1900 to 1914 there was spent on capital account, chiefly for railways, canals, and other public works, nearly \$300,000,000, as compared with \$220,000,000 in the thirty-two years from Confederation to 1899. Even so, at the close of this period the increase in the net debt was only seventy millions, and the per capita burden was less than in 1900.

The following table summarizes sufficiently the stages in this growth:

TABLE 1.—CANADIAN FEDERAL REVENUE, EXPENDITURE AND DEBT, 1870-1914.

Fiscal year ¹	Population	Revenue	Expenditure	Net debt
1870	3,425,000	\$15,512,226	\$18,016,614	\$78,209,742
1880	4,215,000	23,307,407	34,041,756	152,451,589
1890	4,793,000	39,879,925	41,770,333	237,533,212
1900	5,322,000	51,029,994	52,717,466	265,493,807
1910	6,917,000	101,503,711	115,395,774	336,268,546
1911	7,158,000	117,780,409	122,861,250	340,042,052
1912	7,467,000	136,108,217	137,142,082	339,919,461
1913	7,758,000	168,689,903	144,456,877	314,301,625
1914	8,075,000	163,174,395	186,241,048	335,996,850

Through all this period, the chief sources of revenue were customs and excise taxes. The post office and government railways gave practically no net return. Taxes other than customs and excise were insignificant. The tariff was the great reliance of ministers of finance. It yielded large and increasing sums, but encouraged extravagance by the automatic increase it yielded when imports mounted.

For the modest loans required in this period, federal ministers of finance looked wholly to English investors. Of the net debt in 1914, over 99 per cent was payable in London. Capital was too scarce in Canada and opportunities for investment too many for the sweet simplicity of the three per cents to appeal to home investors. Provincial, and to a less extent municipal, borrowers, sought the same market. It was to England, also, that railway

¹ In Canada, until 1907, the fiscal year ended June 30; since that date, on March 31. By "the fiscal year 1914" is understood the year from April 1, 1913, to March 31, 1914.

promoters, backed often by government guarantees, looked almost wholly for the hundreds of millions that were poured into railway construction in these years. All told, at the outbreak of the war, English investors held at least \$2,500,000,000 of Canadian public and private securities, mainly government and railway bonds. The Englishman made few direct investments in Canadian enterprises; he was a creditor, not a partner. The capital required for the business expansion of the period—as seen, for example, in the growth of the capital employed in manufacturing, from \$353,000,000 in 1901 to \$1,247,000,000 in 1911—came almost wholly from within the country. The chartered banks, extremely efficient and economical financial instruments, practically all owned by Canadian stockholders, increased their discounts from \$388,000,000 in 1901 to \$1,101,000,000 in 1914. United States investments, mainly in branch factories, mines, timber lands, and municipal and corporation bonds, reached over \$600,000,000 by 1913.

Even before the war broke out, financial difficulties were looming up. The construction period, with its lavish borrowing, its mounting imports and import duties, its hectic land speculation, had come to an end for the time. The country was realizing that the actual production of goods had not kept pace with expenditure, that the bulk of the energy of the past few years had been directed toward foundation enterprises, such as railways, which had not yet come to the productive point, or had been wasted in speculation. A readjustment set in, which fortunately was being effected without any serious crash, when the fatal August days of 1914 faced the Canadian people with a task immensely greater than had ever been foreseen.

Without a day's hesitation the government and people of the Dominion decided to take their full share in the struggle. In six weeks from the declaration of war 33,000 Canadian soldiers were crossing the Atlantic. Contingent followed contingent until by the summer of 1917 over 430,000 soldiers had volunteered for service, of whom three fourths had been sent overseas.

The first steps taken in the war session of Parliament, in August, 1914, were directed toward averting financial panic and preventing the drain of gold abroad. The government undertook to issue Dominion notes against approved securities deposited by the banks. It authorized the banks to issue excess circulation the year round, instead of during the crop-moving period only,

to an amount not exceeding 15 per cent of their combined capital and reserve, subject to a tax of 5 per cent, and to make payments in banknotes instead of in gold or Dominion notes. The redemption in gold of Dominion notes was also suspended. Power was taken to declare a moratorium, but this power was not exercised. These measures amply secured their purpose, and while for some months commercial depression continued, there was no sign whatever of crash or panic.

The fiscal year, which in Canada begins on April 1, was nearly half over when the war began. The estimates of the Finance Minister had provided for an expenditure of \$146,786,126 on ordinary or consolidated fund account and \$43,949,050 on capital account, or a total of \$190,735,176. To cover the war expenses, an appropriation of \$50,000,000 was made in the August session, of which it was estimated some \$30,000,000 would be required by the end of the fiscal year, on March 31. As a matter of fact, the war expenditure amounted to over \$60,000,000, while ordinary and capital expenditure ran to within two millions of the estimates.

To meet these increased calls, the Finance Minister relied upon an issue of Dominion notes, increased taxes, and loans in London.

By the Dominion Notes act the government secured a loan without interest of \$15,000,000. Under the previously existing arrangement, the government was authorized to issue paper, covered only by a reserve of 25 per cent, of which 15 per cent might be in debentures, but all of which was in fact gold, up to \$30,000,000. Over this sum, all note issues were required to be covered dollar for dollar in gold. The measure of August, 1914, authorized the extension of the amount for which only a 25 per cent reserve was required to \$50,000,000, thus giving \$15,000,000 free. In November, the government by order-in-council issued an additional \$26,000,000, of which \$16,000,000 was lent the Canadian Northern and Grand Trunk Pacific Railway on the security of their own debentures, which had previously been guaranteed by the Dominion but could not be realized upon in the market conditions of that autumn. This action was later sanctioned by Parliament. Steps were taken to reduce the amount of inconvertible paper outstanding, and by March 31, 1916, the total outstanding was \$177,943,000, or an increase of \$60,000,000 over March 31, 1914. Of this amount \$144,000,000 was in \$5,000 notes, used only by the banks, and only \$22,000,000 in the small denominations used by the public. The percentage of gold to

notes in circulation was at this time 68, as against only 41 per cent in 1880, and 35 per cent in 1900, so that ample security was provided. No fresh recourse has been made to this means of securing revenue since 1914. Today the ratio of gold held by the government and the banks to notes outstanding is greater by a small fraction than when the war broke out.

In the emergency, it was not possible to devise new forms of taxation. The only feasible plan was to utilize the customs and excise machinery, and this was done by imposing a tax on coffee and increased taxes on sugar, tobacco, and liquors, estimated to bring in \$7,200,000 in the balance of the fiscal year. Slackening trade, however, and consequent falling off in imports brought a serious decline in the customs duties levied under the old provisions which the new taxes did not offset. The total customs yield for the year 1914-15, including the new taxes, proved to amount to only \$97,000,000, or a decrease of \$30,000,000 from the preceding year.

For loans, there was as yet no thought of turning elsewhere than to the old source, London. Six months' treasury bills were sold in that market in December, 1914, to the amount of £3,000,000, over half of the proceeds being used to retire bills which matured in November; £1,300,000 of Dominion of Canada 1940-1960 stock was sold at 94½, and £5,000,000 5-10 bonds, bearing 4½ per cent, were sold at 99½ for public works expenditure. Arrangements were made with the British government for temporary advances for military purposes up to £12,000,000, with interest at the same rate the British government was paying, 3½ per cent. With a temporary loan of \$5,000,000 from the Bank of Montreal, these measures gave the government ample credit balances both in London and in Canada.

The result of this first war year's financing was the addition of \$113,000,000 to the net debt. The sudden falling off in revenue, coming at the very time that the demands upon the treasury were soaring, brought the result that it was necessary to borrow to cover not merely the whole cost of the war and of the capital expenditures, but a small fraction of the ordinary expenditure as well.

When Parliament reassembled in February, 1915, it was apparent that the war would be a long one, and that much more drastic financial measures were required. In this session a further war appropriation of \$100,000,000 was voted. The Finance Minister presented his budget for the next fiscal year, April 1, 1915,

TABLE 2.—CANADIAN FEDERAL REVENUE AND EXPENDITURE, 1914-15.

Revenue	Expenditure
Consolidated fund receipts \$133,073,482	Consolidated fund expenditure \$135,523,207
Sinking funds 1,645,811	Expenditure chargeable to capital 41,447,320
Net increase to debt.... 113,379,233	Railway subsidies 5,191,507
	Expenses in placing loans 4,911,360
	Sundry transfers 274,656
	War expenditure 60,750,476
\$248,098,526	\$248,098,526

to March 31, 1916, on February 11. He estimated the ordinary revenue for 1915-16 at \$120,000,000. Ordinary expenditure would be \$144,000,000, capital outlay \$40,000,000, and war expenditure \$100,000,000 with \$20,000,000 floating debt to take up. To fill this gap he proposed to raise \$30,000,000 by additional taxation, and the remaining \$154,000,000 by loans.

Of the \$30,000,000 to come from taxes, the customs tariff was again relied upon for the bulk. A straight horizontal increase of $7\frac{1}{2}$ per cent ad valorem in the general and intermediate and of 5 per cent in the preferential tariff, levied alike on the free list and on goods formerly dutiable, with a few specific exceptions, was estimated to yield \$22,000,000 a year. The remainder was to come from a series of minor direct and excise taxes: 1 per cent on the note circulation of banks and the gross income of trust and loan companies, and the net premiums of insurance companies other than life, fraternal, benefit or marine associations; 1 cent on telegraph messages; 5 cents per \$5 on railway or steamboat tickets and 10 cents on sleeping-car berths and parlor-car seats; stamp taxes, 2 cents on cheques, receipts, bills of exchange, express and post office money orders, bills of lading; 1 cent on letters and postcards; 1 to 2 cents on patent medicines and perfumery packages, and 5 cents per quart bottle on non-sparkling wines and 25 cents per pint bottle on sparkling wines.

The weight of tradition, the strength of protectionist feeling, and uncertainty as to the country's resources prevented any more effective attempt to meet expenditure out of taxes. An income tax was urged with growing force, but was still scouted in official quarters.

For its borrowings, the government at first continued to look to London. A public loan of £5,000,000 floated the end of March,

at $4\frac{1}{2}$ per cent, was heavily oversubscribed. From the British government the sum of £2,000,000 monthly continued to be borrowed until June, 1915, when new sources of funds were found. In July, 1915, for the first time in its history, the Canadian government sought the New York market. Two note issues, one of \$25,000,000 for one year and the other of \$20,000,000 for two years, bearing 5 per cent interest, and with the privilege of conversion into 20-year debentures, were sold through the Bank of Montreal and J. P. Morgan and Company at the very favorable price of $99\frac{1}{2}$. A still more radical venture was the decision to float a loan in Canada itself. The chances of success in a country which, however great its resources, had little realized and concentrated wealth, and had been borrowing huge sums for over a decade, and had never raised a popular loan, seemed doubtful. The loan was offered in November, 1915, \$50,000,000, 5 per cent bonds, maturing in 1925, at $97\frac{1}{2}$. It was an immense success. In eight hours it was oversubscribed, and when the books were closed a week later, well over \$100,000,000 had been offered. It was decided to increase the issue to \$100,000,000, accepting the smaller subscriptions in full. Of this sum half was set aside as a loan to the British government, to finance purchases in Canada.

Meanwhile the general financial condition had greatly improved, thanks chiefly to wheat and munitions. The wheat crop of 1915 had proved the most remarkable in Canada's history, in fact a freak crop difficult to parallel in any country's history: about 230,000,000 bushels were available for export at high prices. Then began the placing of Allied orders for supplies, at first in a small and hesitating way, with little realization of Canadian potentialities, but soon on undreamed scales. Trade revived; war orders meant importing machinery and supplies, and war order prosperity meant a revival of imports of luxuries, and so imports and customs duties mounted, and the difficulties of the Finance Minister were lightened.

The change in the situation was most clearly marked in the reversal of relations between the Canadian and the British governments. When the year began, Canada was borrowing from Britain to finance her war preparations at home; when it closed, the Canadian government and Canadian banks were lending still larger sums to the British government to purchase munitions and other supplies on this side of the water. The conditions of exchange in 1915 made some such step highly advisable in Britain's

interest, and the revival of industry and of confidence made it possible for Canada.

TABLE 3.—CANADIAN FEDERAL REVENUE AND EXPENDITURE, 1915-16.

Revenue	Expenditure
Consolidated fund receipts .....\$172,147,838.27	Consolidated fund expenditure .....\$130,350,726.90
Other receipts.....1,555.30	Capital expenditure (railways, canals and public works).....38,566,950.50
\$172,149,393.57	Subsidies .....1,400,171.42
Sinking funds.....\$ 1,773,021.11	Other charges.....3,186,898.20
Net addition to debt..165,780,087.81	War account.....166,197,755.47
\$339,702,502.49	\$339,702,502.49

For 1916-17 a war appropriation of \$250,000,000 was voted. In preparing to meet this call, the Finance Minister, in presenting his budget in February, 1916, at last determined to make the wealth of the country bear a more adequate share of the burden. Minor changes in the tariff were made: an increase in the duty on apples to protect British Columbia growers, and a revenue duty on oils. But the notable feature of the 1916-1917 budget was the introduction of a business profits tax. The insistent need for fresh revenue, the rising popular discontent over the war profits of some munitions makers, and the example of Great Britain all urged action. British example was not followed, however, in determining the basis of the tax; a fixed percentage rather than the pre-war profits were taken as the starting-point to compute the excess. Incorporated companies were to pay 25 per cent on the net profits in excess of 7 per cent, on capital employed of \$50,000 or over; firms and individuals on the excess over 10 per cent. Companies with a lesser capital than \$50,000 were required to pay the tax if the manufacture of munitions or war supplies made up 20 per cent of their business. The tax was to run for three years, and would be retro-active, covering all profits accruing after December 31, 1914. Reasonable deductions for depreciation and renewals were to be allowed. It was estimated that the tax would apply to about 2,500 companies, and that it would yield \$25,000,000 in the three-year period—which proved an underestimate.

For the still larger loans required to provide the balance of the expenditure, the same markets were sought again. In March, 1916, \$75,000,000 was borrowed in New York at 5 per cent, on

5, 10, and 15-year bonds, sold at 99.56, 97.13, and 94.94 respectively, less $2\frac{5}{8}$ per cent commissions. Six months later a second domestic loan was issued, \$100,000,000 5 per cent bonds, maturing in 1931, and offered at 97 $\frac{1}{2}$. The loan was again more than doubly oversubscribed. All subscriptions from \$100 to \$25,000 were taken in full, private subscriptions above that sum cut down, and the \$50,000,000 offered by the banks, "if necessary," turned instead to a credit to the Imperial Munitions Board. To the first loan there were 25,000 subscribers; to the second, 35,000. In spite of the success of the loans it was clear from these figures that the general public had not yet been reached in the degree already achieved in the United Kingdom, France, and Germany.

The arrangements with the British government continued to increase in magnitude and in complexity. At the outset, as has been noted, a large part of Canada's war expenditure was financed by temporary loans from the British treasury. After June, 1915, practically nothing was borrowed for expenditure in Canada, though the practice was continued, and still continues, of borrowing from the British Treasury part of the amount required for the overseas expenditure of the Canadian forces. With an army overseas which reached over 300,000 men, this latter expenditure soon became greater than the direct war outlay in Canada itself, and necessitated the appointment of an Overseas Minister (the Acting High Commissioner in London, Sir George Perley) to supervise it. A special difficulty arose in connection with the expenditure at the front. Canada, like Australia and the other Dominions, has undertaken to bear every cent of the cost of maintaining her own troops, but when these forces are working in close coöperation with British divisions in the field, obtaining rations, equipment and munitions from the same supply bases, it is difficult to determine precisely what the share of each contingent should be. An arrangement was accordingly effected in November, 1916, that a rate per head should be agreed upon to cover all expenditure that could not be differentiated. After careful study of the cost of rations, forage, fuel, clothing, equipment, and general stores and munitions (the latter based not on the daily rate of expenditure of the Ministry of Munitions but on the consumption in the field, in April, 1916), it was agreed that this figure should be set at 6 shillings per day per man. This of course did not include the pay of the troops, which was

on a higher scale than the British rates and was provided direct by the Canadian authorities.

The indebtedness of Canada to the British Treasury at first took the form merely of an open account. It was expected that later a long-term loan would be issued in London to repay it, but a different arrangement was decided upon when the need of financial aid to the British government on this side of the water became clear. At the suggestion of the Finance Minister, it was arranged to issue to the British Treasury Dominion dollar bonds bearing the same rate of interest and with the same maturities as the British public issues from which the Treasury made the advances. These bonds were then to be used by the British government as collateral for its loans in New York or in Canada itself. Up to February, 1917, the Canadian government had issued \$122,000,000 to the British Treasury, chiefly in 3½ and 4½ per cent bonds.

This, however, covered only part of the indebtedness. The balance was left to be adjusted in a similar fashion later, or simply to be offset by the counter indebtedness of Great Britain to Canada, which was reaching large dimensions. In Canada, as in the United States, in view particularly of the exchange situation, it became practically necessary to provide a credit for the British government before war orders could be placed. In December, 1915, the oversubscription of the first domestic loan, \$50,000,000, was turned over as a credit for the Imperial Munitions Board, the buying agency in Canada of the British government. In April, 1916, the Finance Minister, by an arrangement with the banks, acting through the Canadian Bankers' Association, advanced another \$75,000,000 for the same purpose; in July, \$25,000,000 and in September, 1916, \$50,000,000 of the oversubscription of the second domestic loan. In November of the same year a syndicate of Canadian banks arranged a credit to the British government of \$20,000,000 for the purchase of wheat.

In reviewing the fiscal year 1916-17, in his budget speech on April 24, 1917, the Finance Minister noted that the revenue had surpassed all expectations, both as to customs duties and as to the business profit tax. The total revenue had been \$232,000,000, or \$100,000,000 more than in the year 1914-15. Of this sum, customs duties accounted for \$134,000,000, excise for \$24,000,000 and the business profits tax for \$12,500,000, with two

or three million more still to come in.² The ordinary expenditure amounted to \$145,000,000, including \$25,000,000 spent on pensions and on interest charges on war loans, and the capital and subsidy expenditure to \$27,000,000—a welcome decrease. This meant that after paying all current and capital expenditure, and meeting interest and pension charges, a surplus of \$60,000,000 was available toward the principal of the war expenditure, which had been \$217,000,000 up to January 20.

For the coming year, 1917-18 (to March 31, 1918), Parliament voted a war appropriation of \$500,000,000. The estimated war expenditure was put at \$433,000,000, including \$218,000,000 as pay and separation allowances for 400,000 troops, and \$17,500,000 for naval service.

As to new revenue, the Minister of Finance still declined to introduce an income tax, urging the difficulty and cost of administration, the small yield probable, the voluntary contributions to the Patriotic and Red Cross funds—later put by Sir Herbert Ames at \$50,000,000 since 1914—and the existence of municipal and in some cases provincial income taxes. The fairest basis for abnormal expenses was abnormal profits. He therefore proposed to extend the business profits tax, which had yielded large sums and at a low cost of administration—about one half of one per cent. The tax, which would apply to the last accounting period of the three-year term originally contemplated, would now be graduated. Profits between 7 and 15 per cent would be subjected to the existing 25 per cent tax; profits over 15 but not exceeding 20, to a 50 per cent tax, and all profits over 20 per cent to a 70 per cent tax.

The returns of profits made to the government are confidential, but thanks to the desire of the government whip to show that

² The increase in customs was due partly to the increase in rates, but more to the increase in imports or in their value, as shown by the following summary of Canada's foreign trade (excluding coin and bullion, as the movements of gold have not their ordinary significance since the making of the arrangement whereby a depository of the Bank of England was established at Ottawa).

Fiscal year ending March 31	Imports	Exports
1913	\$686,515,000	\$377,068,000
1914	635,383,000	455,437,000
1915	497,376,000	461,442,000
1916	530,211,000	779,300,000
1917	845,330,000	1,179,211,000

great steps had been taken in the direction of the conscription of wealth which the Opposition was demanding, the figures as to some of the larger payments made were put on Hansard in June, 1917, as follows:

TABLE 4.—COMPARATIVE STATEMENT OF TAXATION UNDER BUSINESS PROFITS WAR TAX ACT, 1916, AND THE AMENDMENT THERETO OF 1917.

Name of taxpayer	Accounting period	Amount assessed	Statement showing what the assessment would have been had the amendment of 1917 been in force
Imperial Oil Co...	Jan. 1, 1915—Dec. 31, 1915	\$734,046	\$924,849
Ford Motor Car Co.	Oct. 1, 1914—Sept. 30, 1915	697,323	1,782,094
Canadian Explosives	Jan. 1, 1915—Dec. 31, 1915	609,537	1,337,631
Northern Aluminium Co.	Jan. 1, 1915—Dec. 31, 1915	341,679	822,332
Steel Co. of Canada	Jan. 1, 1915—Dec. 31, 1915	308,240	337,055
Ogilvie Flour Mills Co.	Sept. 1, 1914—Aug. 31, 1915	280,886	547,478
Nova Scotia Steel & Coal Co.....	Jan. 1, 1915—Dec. 31, 1915	237,252	320,754
Metal Drawing Co.	Jan. 1, 1915—March 31, 1916	223,840	669,551
Canada Foundries & Forgings.....	Jan. 1, 1915—Dec. 31, 1915	222,368	590,691
Alberta Pacific Grain Co.....	Aug. 1, 1914—Aug. 15, 1915	178,669	377,220
Richardson & Sons, James (grain) ..	Aug. 1, 1914—July 31, 1915	155,092	380,327
British Empire Grain Co.....	July 1, 1914—June 30, 1915	150,347	415,278
F. W. Woolworth Co. (chain of stores)	Jan. 1, 1915—Dec. 31, 1915	134,498	329,207
Grain Growers Export Co.	July 1, 1914—Aug. 31, 1915	130,777	387,956
Toronto Chemical Co.	July 1, 1915—July 31, 1916	130,520	378,327
Montreal Ammunition Co.	Jan. 1, 1915—Dec. 31, 1915	124,173	358,396
Dominion Steel Foundry Co.....	Jan. 1, 1915—Dec. 31, 1915	112,048	273,180
William Davies Co. (packers)...	April 1, 1914—March 30, 1915	109,624	223,062
John Bertram Sons Co. (machinery)	Jan. 1, 1915—Dec. 31, 1915	104,803	265,485
Penmans (woolens)	Jan. 1, 1915—Dec. 31, 1915	104,130	145,042
Dominion Steel Corporation	April 1, 1915—March 31, 1916	103,721	103,721
Canadian Fairbanks Morse & Co. (machinery & munitions)....	Jan. 1, 1915—Dec. 31, 1915	102,748	131,767

The demand for conscription of wealth, following the proposal of the government in the spring of 1917 to introduce conscription of men, became too strong to ignore. The measure most loudly urged was the graduated income tax which the government had steadfastly refused to introduce. At the same time the "profiteers" were vigorous in their condemnation of the business profits tax as excessive, arbitrary, and discriminating. Apparently the government decided to please both parties. In July, 1917, the Minister of Finance introduced an income tax measure, and at the same time announced that the business profits tax would not be renewed at the expiry of the three-year period; for the ensuing year corporations would pay only one tax, whichever was higher. It was soon discovered that this meant a very great reduction in the case of companies with large profits. Four of the companies listed above, which had paid \$1,930,000 under the original business profits tax, and would have to pay \$4,490,000 under the amended tax, would get off with \$375,000. The protest brought a declaration from the Minister of Finance that if at the expiration of the three-year period the need still existed, abnormal profits would again be subjected to an abnormal tax. With this general understanding, the income tax was speedily enacted.

The new income tax law follows United States rather than English models. It imposes a straight tax of 4 per cent on incomes exceeding \$1,500 (at first \$2,000 was proposed) in the case of unmarried men or widowers without children; and on incomes in excess of \$3,000, on other persons, including corporations. In addition a supertax is imposed as follows: where the income exceeds \$6,000 and does not exceed \$10,000, 2 per cent; from \$10,000 to \$20,000, 5 per cent; from \$20,000 to \$30,000, 8 per cent; from \$30,000 to \$50,000, 10 per cent; from \$50,000 to \$100,000, 15 per cent; above \$100,000, 25 per cent.

These additions to the taxation system made it certain that a substantial share of the burden of the war would be paid by those who were reaping benefits from war prosperity. Much the greater part, however, was still left to posterity. A third domestic loan was floated in March, 1917, for \$150,000,000, with \$266,000,000 subscribed. With this transaction over half of the funded debt became payable in Canada—though not all held by Canadians. The participants again showed an increase in number, but it was still evident that the great body of non-investors had not yet been tapped. To reach them, war savings certifi-

cates, on sale at the branch banks and post offices, in denominations of \$25, \$50, and \$100, maturing in three years, and issued at \$21.50, \$43, and \$86 respectively, were placed on sale in January, 1917. In August, \$10 certificates were added, and it was arranged later that such certificates could be purchased in small instalments by use of the stamp-book method. Large numbers of these certificates have been taken. In connection with the fourth domestic loan, probably for \$150,000,000, to be issued in November, it is planned to make a much wider popular appeal, particularly to the prosperous farmer, than ever before. The sale in New York of \$100,000,000 two-year notes, bearing 5 per cent interest, and issued at 98, with 1½ per cent to the underwriters, was the other important public borrowing of the year.

During the year advances to the British government for the purchase of supplies in Canada continued. On August 27, the Minister of Finance announced that up to that time \$285,000,000 had been advanced by the government and \$100,000,000 by the banks, to the Imperial Munitions Board. The government advances would continue throughout the year at the rate of \$25,000,000 a month. In addition, \$50,000,000 was advanced for the purchase of cheese, hay, oats, and flour.³ During 1916 the value of the output of munitions had been practically \$1,000,000 a day; the orders for 1917 would reach \$500,000,000, even though in some lines orders were lessening because of the ability of British factories to cope now with the situation unaided. Even so, the fact that the British government could buy on this side of the Atlantic only to the extent that it could raise money here would make it necessary to extend the same policy of government and bank assistance to the other main commodities exported to Britain.

The cost of the war for practically three years—to July 20, 1917—has been given by the Minister of Finance at \$623,000,000. Of this amount \$388,000,000 was spent in Canada and the balance in the United Kingdom and France. From April 1 to July 20 war expenditure in Canada amounted to \$39,700,000 and overseas to \$62,600,000, or \$917,000 a day: it doubtless now exceeds \$1,000,000 a day. By the end of the fiscal year the debt will be \$1,200,000,000 or \$1,300,000,000, against \$336,000,000 when the war began.

³ In the month following this statement the banks advanced \$155,000,000 for the purchase of meat and wheat, and further large credits were foreshadowed.

On the same date, July 20, 1917, the total borrowings of Canada from Great Britain amounted to \$317,000,000, of which \$107,000,000 has been repaid by the issue of dollar bonds deposited in New York as collateral, and to be disposed of there or in Canada after the war. The borrowings of Britain from the Canadian government were \$302,000,000, so that quite aside from the indebtedness to Canadian banks, there was a balance on open account due by Great Britain on this date of \$92,000,000—a sufficiently striking change from the former financial relations of Canada and Britain.

The shift of capital sources is made clear by the following table, compiled by the *Monetary Times*, of Canadian bonds, government, railroad, and industrial, sold in the past twelve years:

TABLE 5.—SALES OF CANADIAN BONDS IN CANADA, GREAT BRITAIN AND THE UNITED STATES, 1905-1916.

Year	Sold in Canada	Sold in Great Britain	Sold in United States	Total
1905	\$35,149,921	\$85,621,395	\$9,256,782	\$134,874,531
1906	23,304,958	26,563,700	4,118,350	53,987,008
1907	14,761,683	63,095,057	4,779,000	82,635,740
1908	24,585,140	165,455,031	6,316,350	196,356,521
1909	60,433,964	194,356,788	10,367,500	265,158,252
1910	39,296,462	188,070,128	3,634,000	231,000,590
1911	44,989,878	204,269,143	17,553,967	266,812,988
1912	37,735,182	204,236,394	30,966,406	272,937,982
1913	45,603,753	277,470,780	50,720,762	373,795,295
1914	32,999,860	185,990,659	53,944,548	272,935,067
1915 ¹	114,275,214	41,175,000	178,606,114	335,106,328
1916 ¹	102,938,778	5,000,000	204,943,764	356,882,542 ²

¹ Including internal war loans of \$100,000,000 each, issued in November, 1915, and September, 1916. Of the first loan, \$25,000,000, and of the second loan, \$30,000,000 is estimated to have gone to the United States.

² Included in this sum are \$8,000,000 of a total of \$50,000,000 Canadian bonds repurchased in Great Britain since the war commenced. The inclusion of the \$42,000,000 of unclassified repurchases brings the total of Canadian bond sales in 1916 to \$356,000,000.

In all the financing of the war, a great burden has rested on the Finance Minister, Sir Thomas White, who, before going into politics in 1911 on the anti-reciprocity issue, was general manager of the National Trust Company. Under the Canadian cabinet system, which throws upon a minister legislative as well as administrative duties, and with the preparation of the budget wholly entrusted to him, a greater share of responsibility rests on a minister of finance than on any corresponding official in the

United States. While there is naturally some difference of opinion on policy, it is universally agreed that the administrative tasks have been admirably performed. In this work the Minister of Finance has been greatly aided by the chartered banks. The branch bank feature, and the coördination possible through the Canadian Bankers' Association, have made it possible for the banks to coöperate very effectively in mobilizing the country's financial resources.

The war will leave Canada, in common with the other belligerents, with a heavy burden of debt, but it will leave her also with a fiscal system greatly strengthened by the inclusion of direct taxes, and, more important, with the consciousness of industrial and financial capacities hitherto unrealized.

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METHODS OF PROVIDING FOR EXPENSES OF OBTAINING NEW BUSINESS BY LIFE INSURANCE COMPANIES

It is a well-known fact that new business is obtained by life insurance companies at considerable expense, involving commissions to agents and fees to medical examiners. Attempts have been made to lessen this expense, but are not likely to have a decided effect in the near future. It seems to be good public policy to extend insurance, even at considerable cost, among persons too careless to take the initiative in protecting their dependents. At any rate, it must be expected that the writing of new life insurance business during a year will remain much more expensive than the handling of an equal amount of old business during the same time.

It should perhaps be stated that the term "expense" as used in this paper does not include the payment of death claims, but means the expense of conducting business.

In dealing with the subject of initial expenses, the question at once arises as to the basic principle on which these expenses are to be met. The expense of conducting business is a very different factor from that of insurance risk, where death losses are distributed over a group of persons on certain principles of mutuality. There seems to be a fair consensus of opinion among insurance authorities that, in so far as it is feasible, each policyholder should pay the expense of placing his policy on the books of the company. Indeed, there is sufficient agreement on this point so that it does not seem inappropriate to state in a textbook for beginners in the study of insurance that "an equitable system of loading must require every policyholder to pay the expenses which his policy costs the company, as nearly as this amount can approximately be determined."¹

To carry out this principle requires careful consideration of methods of loading, and of computing the reserve liability of a company; for the ideas back of level net premium reserves ignore the condition that expenses are higher in the first policy year than in subsequent years. This fact was emphasized by the statements of eminent American actuaries as early as 1904, to the effect that level net premium valuation laws had strangled young companies

¹S. S. Huebner, *Life Insurance* (Appleton, 1915), p. 214.

that might have become good companies, and that the older companies today would not be in existence if the level net premium reserve had been required by law from the first few years of their existence.²

While there is fair agreement as to the principle stated above in regard to the allocation of the expense of new business, there is considerable diversity in the methods in use in different countries, and in the different states of the United States in putting the principle into practical operation. In the United States, the methods of loading for the expenses of new business that stand out most prominently are closely associated either with the modified preliminary term method of valuation, or with the select and ultimate method. The merits and demerits of these methods have been the subject of lively debate³ by both European and American actuaries. While it does not seem possible in brief space to give a satisfactory summary of the points made in these debates, it may be said that Mr. M. M. Dawson presented a paper in 1908 before the Institute of Actuaries advocating the select and ultimate method. He had previously presented the method before the Actuarial Society of America (1903), but without especially advocating it. The discussion of these papers, to which reference is made above, brought out the opinions of leading actuaries on the subject and showed that in a comparison of the two methods there were some good arguments for each of them. Both methods have, with limitations, the approval of high actuarial authorities, and the weak features of both have been pretty ably set forth, so that knowledge exists as to where safeguards should be provided.

In the textbook from which the principle stated above is quoted, there are given⁴ some criticisms of the preliminary-term and modified preliminary-term methods of valuation and a defense of the select and ultimate method. As certain of these criticisms are likely to give an incorrect notion of the operation of these methods, they call for some comment.

Before proceeding to examine the views expressed in these criticisms, it should perhaps be pointed out that there is some danger of confusion in the use of the term "reserve" when employed as it is in the discussion on which it is proposed to com-

² D. P. Fackler, *Transactions of the Actuarial Society of America*, vol. VIII (1904), p. 78; Emory McClintock, *ibid.*, p. 80.

³ *Journal of the Institute of Actuaries*, vol. 42 (1908), pp. 425-472; *Trans. Actuarial Soc. Amer.*, vol. VII, p. 418; *ibid.*, vol. VIII, pp. 67-83.

⁴ *Loc. cit.*, pp. 222-226.

ment. On the one hand, we find for a definition of the term "reserve," on page 193, the statement that "the word 'reserve,' however, has come to have a technical meaning in life insurance, due to the fact that most of the states have passed laws requiring some definite method of valuing this fund, and when the term is now used this technical or legal reserve is ordinarily meant." On the other hand, the illustrative calculations shown in the book in the development of the reserve idea treat of the level net premium terminal reserves. One thoroughly familiar with the subject before reading the book has perhaps little or no doubt that the term "reserve" as used on pp. 222-223 means "level net premium terminal reserve," but the discussion would be clarified by the simple statement that the term "reserve" is being thus used in this connection. With this meaning, the reader very naturally asks himself why the author specifies, on page 226 in his defense of the select and ultimate method, that this method permits the company to borrow from "full net premium reserve" instead of using simply the term "reserve" as he did in the criticisms. It is obviously very important in such a criticism not to confuse the use of the term "reserve" to mean "level net premium reserve" and to mean something else, such as legal reserve, for it is a serious matter if legal reserves or if adequate reserves are not being held as a liability, but it is not necessarily a reflection on the soundness or efficiency of a company that level net premium reserves based on certain tables of mortality and certain rates of interest are not being held as a liability.

Limitations of the use of level net premium valuations are well recognized by insurance authorities.⁵ It may be worth while saying at this point that level net premium reserves may be in a certain sense a mechanical or mathematical ideal for a hypothetical company operated without expense, but they are not properly looked upon as an ideal when we are seeking a true valuation as a test of solvency for the actual company that must pay the expenses of conducting business as well as death claims. Bearing on this point, Mr. Fackler made the following statement: "We all know that the true system is a carefully modified gross valuation, in which not alone the savings in the earlier year's mortality but also the unequal distribution of expenses should be con-

⁵ Nichols, "The Limitations of a System of Net Valuations," *Transactions of the Second International Congress of Actuaries*, p. 161; Moir, "Valuation and Distribution," *Trans. Actuarial Soc. Amer.*, vol. X, p. 179.

sidered."⁶ On account of their convenience for some purposes, we easily and thoughtlessly fall into the habit of using level net premium reserves for purposes for which they are far from ideal.

The position is taken in the textbook to which reference is made that there is a "borrowing from reserve" both in the various forms of preliminary-term valuations and under select and ultimate valuations, but that there is a difference between the two in that what is borrowed under the select and ultimate method will never have to be repaid because the mortality which would require it will never occur.

To my mind, the methods are much better described, in a brief way, by saying that the definition of legal reserve has undergone changes in different states and countries so as to allow certain deviations from the level net premium reserve. It is the purpose of such changes to adapt valuations to the principle that each policyholder is to pay the expense of putting his policy on the books of the company, and to meet very practical conditions that are almost sure to confront any successful new company.

Under full preliminary-term valuations the purposes are accomplished by making the first year's insurance term insurance, thus releasing for expenses the difference between the net premium for one year and the gross premium. In the case of ordinary life and twenty payment life, this difference is approximately the amount required for initial expenses. For higher priced policies, this difference becomes so large that some kind of limitation of the preliminary-term plan is desirable. It is the theory of the *modified* preliminary-term valuations that a proper measure for initial expenses is the loading under an ordinary life policy, with full preliminary-term method of valuation, and that therefore a higher priced policy such as a twenty year endowment policy may appropriately be preliminary-term only to the extent of an ordinary life policy. More precisely, it is held that for a policy with annual premiums greater than an ordinary life policy, the net premiums shall be formed by making such a level addition to the net premiums for ordinary life, with full preliminary-term valuation, as will cause the policy to be paid-up or mature according to the terms of the contract. The chief effect of the preliminary-term method is simply that the policyholder contributes a much greater loading in the first year and a less amount of loading in

⁶ D. P. Fackler, *Trans. Actuarial Soc. America*, vol. VIII, p. 79; cf., M. M. Dawson, *Journal Institute of Actuaries*, vol. 42 (1904), p. 438.

subsequent years than under the level net premium method of valuation. It is the theory of the select and ultimate valuations that proper reserves may be obtained from a select and ultimate table where the select table reflects the experience, in a sort of approximate way, of the companies with persons who recently passed a medical examination for life insurance; but the annual premium used in the calculation of reserves by the prospective method is based on the corresponding ultimate table. This gives a first year terminal reserve much smaller than if the annual premium were based on the select table as are the other quantities that enter the valuation. The chief effect of this scheme of valuation is similar to that under preliminary-term valuations in that the policyholder contributes much more to loading the first year than under a level net premium valuation, even if part of the loading is nominally designated as a saving in mortality.

The methods are thus not well described as processes of borrowing from reserve. They are much better described as methods under which the reserve is adjusted to meet the conditions of obtaining new business; and, at the same time, is maintained at such a value as will insure the fulfilment of the contracts by the company.

In illustrating one of the objections which is brought against preliminary-term methods, there occurs⁷ the following statement: "Should the holder of an ordinary life insurance policy valued on the preliminary-term plan die at any time before age 96 the company will not have entirely replenished the reserve borrowed for the purpose of writing its policy and the deficiency must be made up from funds which should be diverted to other uses." For contrast one may well consider the impression obtained from this statement and from the following⁸ by the leader of actuarial thought in America during much of his active life: "The use of this system of Dr. Sprague (preliminary-term system) was advocated by me five years ago provided it could be made legal. If it could be made legal and if the reduction in reserves on other forms could be assimilated to the reduction on the ordinary life plan, I should have nothing but praise for that system."

In considering the first of these two statements, we may give a simple illustration that shows how the operation of preliminary-term valuations may have the opposite effect by obviating the

⁷ *Loc. cit.*, p. 223.

⁸ McClintock, *Trans. Actuarial Soc. America*, vol. VIII, p. 80.

necessity of diverting funds to somewhat questionable purposes. Suppose an ideal case under the American Experience Table of mortality in which each of 100,000 persons of age 35 takes an ordinary life policy to operate with preliminary-term valuations. Let \$21.75 be the gross premium per thousand, and \$8.65 be the net term premium for this one year. Under the table, the number of deaths of the year is 895 and the interest on \$865,000 is such that \$895,000 is available at the end of the year to pay all the death claims. Moreover, the difference between \$21.75 and \$8.65 or \$13.10 is available on each policy for acquisition expenses. This is reasonably near what is required under present American methods of writing business, and there has been no borrowing from the funds of the company. Suppose, on the other hand, that these policies had been written on the level net premium valuation basis; then there would be no such amount as \$13.10 available from the new entrant and there would be a really significant borrowing from funds belonging to the group of older members, not only for the expenses on the policies of the 895 that die during the year, but also for the expense of the policies of the survivors of the 100,000 insured. This illustration shows clearly that in a large way the preliminary-term method obviates the necessity of borrowing the funds of the older policyholders to write new business. The holding of modified preliminary-term reserves instead of level net premium reserves does not mean that there is a deficiency in adequate reserves. Indeed, there is not the least evidence that, on behalf of the 100,000 persons used in my illustration, a company with insurance on the preliminary-term plan would have to borrow anything from the time the insurance is taken until the last claim is paid. The same statement would hold under the select and ultimate method, if the assumed saving in mortality is experienced.

In all the discussion of this subject, the effective criticism on the one side is not against the modified preliminary-term valuations, but on the danger of carrying modifications too far. On the other side, it is held as pointed⁹ out by the distinguished English actuary, Mr. George King, as an objection to the select and ultimate method that "it would be very difficult to change the table to be used in the valuation when valuing by the select and ultimate method, because that would disturb everything." Of course, in theory there is possible infinite variation of the select

⁹ *Journal of the Institute of Actuaries*, vol. 42 (1908), p. 454.

and ultimate method by a change in the percentages of ultimate rates used to get select rates. But it is difficult to make the changes in practice. Again, Mr. King, who seemed to favor the preliminary-term method in preference to the select and ultimate method, stated as his principal objection¹⁰ to the select and ultimate method that the allowance for new business depended, not on the cost of the new business, but upon the table of mortality used in the valuation.

To summarize, the question as to which is the better of the two methods is not a one-sided question, as would appear from the textbook whose criticisms we have considered. It does not seem from what has been written and from somewhat intimate personal knowledge of the operation of these methods that either one has a clear advantage over the other. It does seem rather that with a strict adherence to modified preliminary-term valuations, and with the present practice under the select and ultimate method, the evidence is not good that the differences between the two exceed the effect of the somewhat arbitrary factors that enter into these valuations. On the one side, it is important to guard against carrying too far the allowances in preliminary-term valuations by modifications to standards that differ much from modifications to the ordinary life policy; and, on the other side, it is important to make more convenient the way to changes in the select and ultimate standard as soon as experience can be used to show that changes are desirable.

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¹⁰ *Loc. cit.*, p. 453.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

NEW BOOKS

BOGARDUS, E. S. *Introduction to sociology*. (Los Angeles: Univ. Southern California Press. 1917. Pp. 343. \$1.50.)

ELLIOT, H. *Herbert Spencer*. Makers of the nineteenth century, edited by Basil Williams. (London: Constable. 1917. Pp. vi, 330. 6s.)

ELLWOOD, C. A. *An introduction to social psychology*. (New York: Appleton. 1917. Pp. xii, 343. \$2.)

This is a restatement as a textbook of the author's *Sociology in its Psychological Aspects*. The author has succeeded in outlining the leading phases of his subject and has arranged his discussion helpfully in its sequence, subdivisions, and references. The repetition sometimes seems monotonous but is probably needed in such a text. There is a catholicity about the author's thinking that will be a wholesome corrective for one-sidedness in teacher or students; there is not only a willingness to see strength as well as weakness in divergent opinions but also a desire to gain the strength of each in some inclusive conception. The style is easy, so easy, in fact, that the student may be lulled into agreement rather than aroused to argument, and may respond to the pleasant flow of ideas by drifting with the current.

The real limitation of the book for teaching purposes is its abstractness. The author probably realizes his desire to "avoid, as far as possible, an overspecialized scientific terminology"; but his illustrations are so few and so brief that the discussion is almost like a succession of conclusions about unknown facts, as far as the student is concerned. Certainly the richness of the author's observation and reading has supplied him with actual social situations to interpret and vitalize his conclusions. Then, why not give the student at least some concrete base on which to stand? If the teacher of the parallel reading can supply sufficient illustrative material, the present text can well serve to guide and strengthen the course; but, if not, the text may evoke confidence in the student without understanding.

The first chapter is devoted to definitions and methods and the second and third chapters to the organic background and the interrelations of human and social evolution. Then follow discussions of the unifying influences in society, the continuity of these influences from generation to generation, and their change under normal and under abnormal conditions. The next chapters expand previous statements into detailed analyses of instinct and intelligence, imitation and suggestion, and sympathy in the social life. The author's success in combining different opinions is specially shown in his final chapters on the contributions of government, religion, morality, education, etc., to social order and on the varied

views of social progress and the nature of society. The book is sane and suggestive and gives a splendid skeleton to cover in class with flesh and blood.

W. H. HECK.

ELLWOOD, C. A. *Syllabus for an elementary course in sociology.* (Columbia, Mo.: Missouri Book Co. 1917. Pp. 26. 10c.)

Combines the author's *Sociology and Modern Social Problems* with his *Introduction to Social Psychology* as a basis for an elementary course.

HARVEY, J. and others. *Competition: A study in human motive.* (London: Macmillan. 1917. Pp. xiii, 232. 2s. 6d.)

HOBSON, J. A. *The evolution of modern capitalism. A study of a machine production.* New edition. (New York: Scribner. 1917. Pp. xvi, 488.)

SEAGER, H. R. *Principles of economics.* Second edition, revised and enlarged. (New York: Holt. 1917. Pp. xx, 662.)

Five hundred practical questions in economics. For use in secondary schools. (Boston: Heath. 1916. Pp. 59. 25c.)

This little volume is prepared by a committee of the New England History Teachers Association. Some of the problems have already been published elsewhere, by Professor Day and Dr. Davis of Harvard University in their pamphlets on *Questions on the Principles of Economics*. The committee which had this in charge was composed of Winthrop Tirrell, High School of Commerce, Boston; Edmund E. Day, Harvard University; Horace Kidger, Technical High School, Newton; Thomas H. H. Knight, Girls' High School, Boston; Margaret McGill, Classical High School, Newton; and Sara H. Stites, Simmons College.

Economic History and Geography

NEW BOOKS

BARRON, C. W. *The Mexican problem.* (Boston: Houghton Mifflin. 1917. Pp. xxv, 136. \$1.)

Contains a considerable amount of economic data; a special study of the oil resources in Mexico, and the experience of the Standard Oil Company. Author emphasizes the need of economic development.

BEER, G. L. *The English-speaking peoples, their future relations and joint international obligations.* (New York: Macmillan. 1917. Pp. xi, 322. \$1.50.)

The title indicates a breadth of treatment of present international problems far outside the economic sphere. Yet, as might be expected of the author, economic factors are never neglected, and a long chapter on "economic interdependence" is an admirable survey of the recent commercial relations of the great powers, with suggestive glimpses into the future.

C. D.

BOYCE, W. S. *Economic and social history of Chowan County, North Carolina 1880-1915*. Columbia University studies in history, economics and public law, vol. LXXVI, no. 1. (New York: Longmans, Green and Co. 1917. Pp. 293. \$2.50.)

To be reviewed.

CALHOUN, A. W. *A social history of the American family. From colonial times to the present*. Vol. I. *Colonial period*. (Cleveland, O.: Arthur H. Clark Co. 1917. Pp. 348. \$5.)

COLBY, F. M., editor. *New international year book; a compendium of the world's progress for the year 1916*. (New York: Dodd, Mead. 1917. Pp. 839. \$6.)

CRAM, G. F. *Descriptive review showing development of the state of Pennsylvania*. (Chicago: George F. Cram Co. 1917. \$6.50.)

CURREY, C. H. *British colonial policy, 1783-1915*. (London: Milford. 1917. Pp. 266.)

DOMINIAN, L. *The frontiers of language and nationality in Europe*. (New York: Holt. 1917. Pp. xviii, 375.)

In view of the crisis in contemporary Europe this book appears most opportunist. Published under the auspices of the American Geographical Society of New York, lavishly supplied with maps and plates and with the usual apparatus of scholarship, the book seems qualified to become a standard source of information on the topics in the field it covers.

C. D.

FULLER, G. N. *Economic and social beginnings of Michigan; a study of the settlement of the lower peninsula during the territorial period, 1805-1837*. (Lansing, Mich.: State Hist. Commission. 1917. Pp. 72, 630. \$1; gratis to libraries.)

HAMMOND, J. L. and B. *The town laborer, 1760-1832: The new civilization*. (New York: Longmans. 1917.)

HANNA, M. A. *Trade of the Delaware district before the Revolution*. Smith College studies in history, vol. II, no. 4. (Northampton: Dept. of Hist. of Smith College. 1917. Pp. 240-348. 50c.)

HERRICK, C. A. *History of commerce and industry*. (New York: Macmillan. 1917. Pp. xxv, 562. \$1.60.)

HODGES, H. R. *Economic conditions, 1815 and 1914*. (London: Allen & Unwin. 1917. Pp. 91. 2s. 6d.)

HOTBLACK, K. *Chatham's colonial policy; a study in the fiscal and economic implications of the colonial policy of the elder Pitt*. (New York: Dutton. 1917. Pp. 219. \$2.50.)

JOAD, C. E. M. *Robert Owen, idealist*. (London: Fabian Soc. 1917. Pp. 32.)

KETTLEBOROUGH, C. and LAPP, J. A., editors. *The state constitutions*. (Indianapolis: B. F. Bowen & Co. 1917.)

LAPP, J. A. *Important federal laws.* (Indianapolis: B. F. Bowen & Co. 1917.)

LAUREYS, H. *Essai de géographie économique du Canada.* (Montreal: Dr. Henry Laureys, 399 Viger Ave. 1914. \$1.50.)

A clear statement of the annual resources of Canada, with excellent charts and diagrams.

MAXWELL, S. *The resources and opportunities of Montana.* (Helena: Secretary of State. 1916. Pp. 191.)

MERK, F. *Economic history of Wisconsin during the civil war decade.* (Madison: State Hist. Soc. 1916. Pp. 414. \$2.)

ORCUTT, W. A. *Burrows of Michigan and the Republican party: A biography and a history.* (New York: Longmans. 1917.)

POMMEREUIL, R. *La guerre économique, 1914-1917.* (Poitiers: Oudin. 1917. Pp. 351. 5.50 frs.)

PROTHERO, R. E. *English farming past and present.* Second edition. (New York: Longmans. 1917. Pp. xvi, 504. \$2.50.)

Brings to date the tables of English wheat prices and agricultural statistics.

PYLE, J. G. *The life of James J. Hill.* Two volumes. (New York: Doubleday, Page. 1917. Pp. 958.)

RADER, P. S. *The history of Missouri, from the earliest times to the present.* Revised edition. (Jefferson City, Mo.: Hugh Stephens Co. 1917. Pp. 219.)

RENARD, G. *La situation économique de la France avant et après la guerre.* (Paris: Giard & Brière. 1917. 1 fr.)

SCHOLEFIELD, G. H. *New Zealand in evolution, industrial, economic and political.* (New York: Scribner. 1917. Pp. 263. \$1.75.)

SEYBOLT, R. F. *Apprenticeship and apprenticeship education in colonial New England and New York.* (New York: Teachers College, Columbia University. 1917. Pp. 121. \$1.)

SMART, W. *Economic annals of the nineteenth century, 1821-1830.* (New York: Macmillan. 1917. Pp. xxii, 584. \$6.50.)

STEVENS, E. G. *Civilized commercialism.* (New York: Dutton. 1917. Pp. 252.)

THOMPSON, C. M. *History of the United States: political, industrial, social.* (Boston: Sanborn. 1917. Pp. xx, 540.)

WASHBURN, C. G. *Industrial Worcester.* (Worcester, Mass.: Davis Press. 1917. Pp. 348. \$2.)

WELCH, C. *History of the Cutlers' Company of London.* (London: The Cutlers' Co. 1916.)

WESTERGAARD, W. *The Danish West Indies. Under company rule (1671-1754). With a supplementary chapter, 1755-1917.* (New York: Macmillan. 1917. Pp. xxiv, 359, illus. \$2.50.)

The foreign relations of the United States. Part I: 1. *The democratic ideal in world organization.* 2. *Future Pan-American relations.* Part II: 3. *Future relations with the Far East.* 4. *Investments and concessions as causes of international conflict.* Proceedings of the Academy of Political Science in the City of New York, vol. VII, nos. 2-3, edited by H. R. MUSSEY and S. P. DUGGAN. (New York: Published by the Academy. 1917. Pp. xxxi, 331; vi, 129. \$1.50.)

A series of addresses and papers presented at the National Conference on Foreign Relations of the United States at Long Beach, N. Y., May 28-June 1, 1917. The following articles are included: "Economic access and neutralization of waterways," by J. Russell Smith; "Labor as a factor in the newer conception of international relationships," by Jane Addams; "Socialism and the terms of peace," by Meyer London; "Commercial and financial interests of the United States in the Caribbean," by Edwin M. Borchard; "Commercial and financial agencies of Pan-American Union," by James Carson; "Land ownership by aliens," by Hans von Kaltenborn; and five papers on "Investments and concessions as causes of international conflict."

Review of the historical publications relating to Canada. University of Toronto studies, vol. XXI. (Toronto. 1917. Pp. 192.)

Contains twenty-seven items under the head of geography, economics and statistics, including several on Canadian railroads and a number on Canada in relation to the war.

L'effort économique de la France pendant deux ans et demi de guerre. (Paris: Berger-Levrault. 1917. 1.50 fr.)

Agriculture, Mining, Forestry, and Fisheries

Introduction to Rural Sociology. By PAUL L. VOGT. (New York: D. Appleton and Company. 1917. Pp. xvi, 443. \$2.00.)

Not long ago the reviewer was discussing with a well-known sociologist the place of rural sociology as a subject of study and instruction. "I am not sure there is such a thing," said he. "To me rural sociology is more or less mythical. I've been prospecting for several years and recently I've had several graduate students and two trained investigators surveying the field—and *I haven't struck pay dirt yet.*"

Rural sociology is a very new subject—and a very ambitious one—but perhaps few economists or sociologists today will deny the existence of a distinctively rural field of sociological study; and a few, at least, dignify it with the title of social science. But whatever the status of the subject, this *Introduction to Rural*

Sociology certainly indicates "pay dirt." Just what percentage of rural sociology it will assay depends somewhat on the chapter chosen as a sample, but it is "pay dirt."

Moreover, we have here sociological materials, typical data, suggestively rich fields for further exploration—leads rather than actual veins; indications rather than fixed conclusions. Some of these data are original and thought-provoking as, for example, the chapters on Population Movement and Rural Morality. Some are not sufficient for generalization; notably those dealing with the land question, tenancy and farmers' organizations. All exemplify the inductive method—facts before conclusions.

No formal definition of rural sociology is attempted, but the titles of the chapters indicate its ramifications. Physical environment, farm machinery, good roads, size of farms, tenant right, farmers' incomes, rural health, insanity, morals, rural politics, essentials of successful economic coöperation among farmers, schools and other educational agencies, county farm bureaus, the country church, the county fair, the village (in six chapters), rural organization and leadership, are some of the topics discussed. All of these are in greater or less degree related to rural social welfare, just as all of them are somehow related to land values or the purchase of a farm. Perhaps this is sufficient reason for considering them subjects of sociological study and investigation.

The author approaches the subject from the point of view of the rural Middle West. His own contributions are chiefly from Ohio, although many of his data and illustrative materials are from other states or countries. Since the body of data presented is necessarily meager, this narrowing of the field strengthens rather than weakens his tentative conclusions. In suggesting remedies or projecting programs of improvement, however, the author does not always keep in mind these geographic limits.

The chapters on the village are a distinct contribution to sociological literature. The American village has been too little considered both as a factor in rural life and as a center or starting point for rural improvement. Recent fugitive studies indicate that the field of rural government deserves particular attention, not only by students but by citizens. Rural sanitation, rural health, village planning, and community recreational facilities are closely related to or dependent upon village organization or municipal government. "The evidence from a survey of modern tendencies indicates that the time is ad-

vancing when some of the brightest products of modern civilization are going to find their source and development in the quiet, rational, cultured existence of the American village, renewed, revived, proud of its advantages, and offering those satisfactions which answer to the most fundamental cravings of human nature." If this quotation is true, it shows the way to a comparatively new point of study and attack—indications which county farm bureaus, social workers and rural social engineers may well follow. If true, even in part, the author has done well to emphasize the importance of a hitherto neglected social and political grouping.

The book is well written with a fresh, virile, optimistic pen. It is purposely constructive. The author is imbued with the idea that data, statistics, materials, facts, should form the basis or starting point of a progressive program; that rural sociological research finds its justification in rural social service. Nearly every chapter ends with a list of remedial measures or a program of rural social advancement. Because of its basis of fact, its general freedom from dogmatic statement, its constructive intent, its modest claims and its virility, this is the most valuable book dealing with rural sociology the reviewer has read.

ALEXANDER E. CANCE.

Massachusetts Agricultural College.

The Organization of the Lumber Industry. With Special Reference to the Influences Determining the Prices of Lumber in the United States. By WILSON COMPTON. (Chicago: American Lumberman. 1916. Pp. x, 153.)

The present military need of spruce for aeroplanes, of yellow pine for cantonments, and of Douglas fir for wooden ships has again brought lumber into the limelight, and books which seek to explain the peculiar conditions existing in the industry find ready circulation. Economists in particular will be interested in the present volume both because it contains a wealth of detailed information nowhere else so easily accessible and because it employs a method of price determination which differs in some important respects from the so-called orthodox theory.

In the introductory chapter Dr. Compton briefly reviews the lumber industry historically, emphasizing such topics as price influences, leading characteristics, labor conditions, etc. Chapters 2 and 3 depict the organization on the side of production and con-

sumption respectively. Ownership, Prices of Standing Timber, and Prices of Lumber occupy chapters 4 and 5. The two remaining chapters (6 and 7) discuss concrete influences which have affected lumber prices.

Throughout the monograph the author seeks to establish three conclusions, all of which are contrary to the findings of federal investigators: First, that the tendency to large concentrations of forest lands and the resultant withholding of timber from the market have not raised market prices; second, that lumber manufacturers' associations, except in local instances, have not affected market prices; and, third, that a sufficient explanation of the deviation of lumber prices from general prices, historically viewed, is found in the influence of exhaustion of local stands.

Any criticism of the book should consider the collecting of data, presentation of material, and correctness of deductions. An astonishing array of statistics meets the eye. The number, capacity, and capitalization of sawmills, regional production, extent of concentration of timber ownership, and general and relative price movements all testify to extensive and laborious research. Unfortunately, the very amount of this material obscures the lucidity of thought. The deductions drawn from this data are exceedingly interesting, but the limited scope of the present review forbids exhaustive discussion. Fortunately, a very able criticism has already appeared in this periodical from the pen of Dr. Stephens,¹ and the present reviewer is in substantial agreement with his appraisal—especially those paragraphs wherein he points out Dr. Compton's failure to stress properly the psychological aspects of his subject. The psychology of price determination, for instance, is unnecessarily slighted in the monograph. Dr. Compton very rightly points out that with each great shift to a new producing area prices of lumber have naturally risen, due to increased cost of production; but to conclude, as he does, that this exhaustion of local stands is the only explanation of the upward movement of lumber prices in so far as they have risen above general prices, shows a failure to understand the state of mind of lumbermen in recent years. For example, the first serious apprehension regarding the depletion of timber lands arose simultaneously with the destruction of the white pine region of the Middle West. Predictions were freely made that within fifty years our supply of native timber would be consumed. Middle West mill owners, reap-

¹ See G. A. Stephens, "Determinants of Lumber Prices," *THE AMERICAN ECONOMIC REVIEW*, vol. VII, no. 2 (June, 1917), pp. 289-305.

ing fat profits from the dwindling supply of white pine, hastily invested in Southern pine, and later in Douglas fir. The period which followed was one of shameless exploitation such as has been seldom equalled in all the sad history of our public domain. Men literally begged, borrowed, and stole in order to secure timber lands, and an era of Pinchotism, admirable in some respects, simply fanned the flames of speculation.

This rapid absorption of timber by private owners exaggerated the danger of monopoly in the minds of buyers, dealers, and middlemen, thus enhancing the actual influence of holders to determine prices, all of which resulted in inflating prices to a point above that set by the actual pull of demand and supply. The mere fact that a condition of competition existed in the lumber market was not alone sufficient to offset this bullish movement. Moreover, because mill owners thought they saw large returns in timber investments *per se* they neglected the milling end of the business, making no sustained attempt to introduce cheaper methods of production. In fact, only today when facing a broken market, are concerted efforts in this direction being undertaken.

The phenomena just outlined has been so apparent during the past decade that few writers have dared to ignore them, and Dr. Compton in failing to give them a place in his deductions clearly shows that he underestimates the effect on buyers, dealers, and middlemen of the *assumed* danger of monopoly which may be found in a market where competition freely exists, and thus to some extent he vitiates the value of his final conclusions.

To summarize: The author is to be congratulated on exploring a vast tract of hitherto uncleared territory, but since in his wanderings from the beaten path, he has obviously overlooked certain recognized factors in trail making, his goal cannot be accepted as final until the other possible openings have been investigated and found either to be wrong or to coincide with his conclusions.

EDWIN CLYDE ROBBINS.

University of Minnesota.

NEW BOOKS

ATKESON, T. C. *Semi-centennial history of the patrons of husbandry.* (New York: Orange Judd. 1916. Pp. xii, 364.)

BELLET, D. *L'alimentation de la France et les ressources coloniales ou étrangères.* (Paris: Alcan. 1917. 3.50 fr.)

HART, S. H. *Wool; the raw materials of the woolen and worsted industries.* (Philadelphia: The Philadelphia Textile School of the Pennsylvania Museum and School of Industrial Art. 1917. Pp. xviii, 228.)

LEVERETT, F. and SARDESON, F. W. *Surface formations and agricultural conditions of northeastern Minnesota.* (Minneapolis: Geological Survey. 1917. Pp. 72.)

MACNUTT, J. S. *The modern milk problem; in sanitation, economics, and agriculture.* (New York: Macmillan. 1917. Pp. 258. \$2.)

MERRILL, F. A. *Tenancy in the South.* (Athens, Ga.: State Normal School. 1916. Pp. 11.)

A serviceable study based upon data of the federal census of 1900 and that of 1910. During the decade there was a slight increase in the percentage of farms in the South operated by tenants. Virginia and Louisiana were the only southern states that increased the ownership cultivation of farms. It is stated that the average life of a tenant upon southern farms is about one and a half years.

NOURSE, E. G. *Outlines of agricultural economics. A class-book of questions and problems.* (Chicago: Univ. Chicago Press. 1917. Pp. 95. 50c.)

O'BRIEN, C. *Food preparedness for the United States.* (Boston: Little, Brown. 1917. Pp. 118. 60c.)

The author made an investigation in the latter part of 1916 of economic conditions in Germany, particularly with reference to the food supply. This book emphasizes the factors and the lessons to be learned from the experience of European belligerents in regard to food control.

SMITH, S. S. *The mining industry in the territory of Alaska during the calendar year, 1915.* Bulletin 142. (Washington: Dept. of the Interior, Bureau of Mines. 1917. Pp. 65.)

STEBBING, E. P. *British forestry. Its present position and outlook after the war.* (London: Murray. 1916. Pp. xxv, 257.)

TOMKINSON, C. W. *State help for agriculture.* (London: Unwin. 1917. 3s. 6d.)

TURNOR, C. *The land and the empire.* (London: Murray. 1917. Pp. 144. 3s. 6d.)

Manufacturing Industries

Household Manufactures in the United States, 1640-1860. A Study in Industrial History. By ROLLA MILTON TRYON. (Chicago: The University of Chicago Press. 1917. Pp. vii, 413. \$2.00.)

In this study of household manufacture the term is limited to

the fabrication of goods in the home, from raw materials produced upon the premises, for use in the home; and, of such goods, only those are included which are now generally made in factories. Using the term in this restricted sense, the author aims (1) to show what influences affected household manufacture in the period under discussion, (2) to describe its extent and importance in the family economy, (3) to "connect the subject with the general economic and political history of the nation, and to portray it as one of the dominant elements in the life of this country for nearly two centuries."

The book contains eight chapters of very unequal merit. After an introductory chapter, chapter II discusses *Factors Affecting Household Manufactures in the Colonies*. This chapter suffers in the poor organization of the treatment of British and colonial legislative acts affecting manufacture, and from a lack of careful interpretation. The author apparently follows Beer in his interpretation of the effects of the British commercial legislation. It is a matter of note that several pages are devoted to restrictions, bounties, and premiums, and less than one page to a coherent discussion of the most important economic influence of the period, so far, at least, as the northern and middle colonies were concerned—the West India trade. It is a weakness of the entire book that it fails throughout to take sufficient account of the effect which underlying economic conditions must have had upon household manufacture, and fails, in consequence, to give a correct picture of the part played by this type of organization in the economic life of the nation.

By way of contrast, chapter III, *The Status of Household Manufactures in the Colonies*, is excellent. Chiefly devoted to a description of the extent and importance of household manufacture to the family economy during the colonial period, and the methods of manufacture in the home, it shows careful search of documentary records and skilful assembling of materials from original sources with those of other secondary writers. Much the same may be said of chapter VI, *The Products of the Family Factory*, which deals with the entire period included in the title. In these two chapters, mainly descriptive, the author is at his best. One feels, however, that the reliability of the statements of contemporaries is not always carefully weighed, and the conclusions based upon them a little doubtful in consequence. These chapters suffer also by the narrow definition given to household manu-

facture. The omission of the partial family manufacture of many goods partly made outside makes it impossible to weigh accurately the relative importance of household manufacture in the family economy.

Chapter IV is devoted to the period from 1784 to 1809, during which the author regards household manufacture as "the dominant factor in the struggle for industrial independence." One marvels that there is in this chapter no discussion whatever, save by indirection, of the effect upon manufacture of the carrying trade which fell into our hands at the outbreak of the Napoleonic Wars.

Chapters V and VIII, *A Year's Output of the Family Factory* and *The Passing of the Family Factory*, consist mainly of tables of statistics. Those in the latter chapter greatly need compression and are not scientifically used. They are cited to show the decline of household manufacture through the comparison of census statistics for 1840, 1850, and 1860 by value of goods made, making no reference to changes in the general level of prices or for decrease in the value of household-made goods due to the very improvements in factory manufacture which they are intended to indicate. Cloth made in the household would of course be worth less in competition with factory-made cloth. The figures show an undoubted decline, but additional qualifications should have been placed upon their interpretation.

Chapter VII, *The Transition from Family- to Shop- to Factory-Made Goods*, contains an interesting analysis of the stages of industrial evolution. Tryon divides the stages into (1) family, (2) itinerant-supplementary, (3) shop, (4) mill, small-factory, and (5) large factory stage. One is again surprised that the function of the merchant as a step between the handicraft and the factory stage is almost completely neglected, except for the peddler organization.

The book will be of value to the economic historian as a convenient and serviceable storehouse of data bearing on household manufacture. No other single volume known to the reviewer contains so much source material on the subject for the country as a whole. Unfortunately it is not well organized; it lacks proportion and emphasis, and is conspicuously weak in interpretation. The author's generalizations and conclusions are sometimes inconsistent with data cited elsewhere in the book, and there are occasional careless statements, in which the author evidently does not say what he means. These latter defects are apparently due

to haste in preparation. A revision along these lines would considerably increase the serviceability of the book as an "adjunct to history courses in elementary, high, and normal schools, and to certain courses in the department of home economics and household arts," a use for which the book is in part intended by its author.

HARVEY A. WOOSTER.

University of Missouri.

Dressmaking as a Trade for Women in Massachusetts. By MAY ALLINSON. Publications of the Department of Research of the Women's Educational and Industrial Union, Economic Relations of Women, Vol. IV. United States Department of Labor Statistics, Whole No. 193; Women in Industry Series, No. 9. (Washington: Superintendent of Documents. 1916. Pp. 180.)

Miss Allinson's study of dressmaking as a trade for women was made in coöperation with the Boston Trade School for Girls and reflects throughout the open-minded educator's point of view. Dressmaking as a trade has much to recommend it in comparison with other employments for women—good wages, generally good surroundings, a recognized social status, an unusual field for advancement, an occupation useful in itself to the worker, her family, and friends.

An interesting chapter of the monograph traces the historical development of the trade through its several phases from hearthstone to factory, showing, nevertheless, the persistent survival of primitive forms. Side by side with wholesale manufacture stand today the custom shop, catering to those who desire exclusive product with individuality and fine handwork, and the day worker who goes from home to home.

It is perhaps trite to say that the problems of the dressmaking trade are questions of capital, credit, and labor. Of these the labor question is far the most important. With the development of the trade there has come increasing demand for skill in the worker while modern business pressures, crushing out the old apprentice system, have virtually deprived the young worker of the possibility of learning her trade in the shop, where there is no longer time to teach and the whole tendency is to make her a specialized worker. So acute has this situation become, it is claimed, that it even "menaces the existence of the industry."

At this juncture the trade school seems to offer the most hopeful means of meeting the immediate need. Most of these schools offer sewing and dressmaking courses, but such courses must be made to fit the girl for the trade and be not merely a part of a "home making" department if they are to fulfil this large industrial mission. In teaching dressmaking for the trade certain fundamentals must not be lost sight of. (1) It is necessary to know the trade opportunities of the locality, the kinds of shops, methods of work in vogue, class of work, numbers employed, etc. (2) The school must set commercial standards of efficiency in technique, accuracy, and speed. While the girl making her own gown at home may baste and rip, try this effect or that, the girl in the shop must make every motion count toward the finished marketable product. (3) The school must bridge for the worker the gaps between successive grades or stages of advancement in the industry. This is being most successfully done by schools that, with a knowledge of local conditions, follow up the worker they send into the trade and offer short supplementary and intensive courses which at each step help her to acquire quickly the knowledge and skill needed for the next advancement. (4) The school should also recognize the problem of the seasonal character of the trade for which it is fitting the young worker and provide, if possible, an alternate occupation. In some localities it has been found practical to alternate machine work in the ready-made goods factory which prepares its product in advance of the season of the custom shop. Special courses may well be introduced at such slack periods also.

In setting forth the business conditions which most seriously affect custom dressmaking (ch. 3) the study brings to the consumer her full responsibility for some of its most serious problems. The custom dressmaker, however limited her resources, dares not require prompt payment of bills from her patrons and consequently not only often loses cash discounts herself, but is unable to pay her employees the full wages due. How far this may go is indicated in tables on pages 59-61.

With such handicap and confronted by the competition of factory-made goods and the large commercialized shop, the small customs dressmaker is being slowly squeezed out of her aforesaid sphere of work. More's the pity!

While the monograph is essentially a direct appeal to the educator, the historical review of the development of the industry and the chapters which set forth present business conditions are

recommended to the thoughtful consumer. They are a real contribution where trustworthy statistics have been entirely lacking.

SARAH S. W. WALDEN.

NEW BOOKS

BARBER, H. L. *Story of the automobile; its history and development from 1760 to 1917, with an analysis of the standing and prospects of the automobile industry.* (Chicago: Munson & Co. 1917. Pp. 48.)

WEEKS, L. H. *A history of paper manufacturing in the United States, 1690-1916.* (New York: Lockwood Trade Journ. Co. 1917. Pp. 352. \$3.)

WUPPERMAN, H. *The enameled ware industry of Germany.* (New York: Printed by Froman & Hacker. 1917. Pp. 93.)

Abstract of the census of manufactures, 1914. (Washington: Bureau of the Census. 1917. Pp. 722.)

Transportation and Communication

The Kentucky River Navigation. By MARY VERHOEFF. Filson Club Publications, No. 28. (Louisville: John P. Morton and Company, Publishers to the Filson Club. 1917. Pp. 257. \$3.50.)

This volume makes a twofold contribution to the industrial history of the West; first, as a study of the commercial development of the country tributary to the Kentucky River; and second, as a critique of the policy of river improvement as applied to that stream. The commerce of the river is studied mainly from the point of view of river improvement. The leading topics discussed in the volume are: (1) river improvement; (2) river commerce; (3) relation of commercial growth to river improvement; and (4) mountain traffic in relation to river improvement.

During the régime of state activity, which extended to 1880, various methods were employed to secure funds for the work, including improvement by companies chartered by the legislature, and appropriations by the state itself. The author is of the opinion that financially this work was a failure (p. 30). From 1880 to 1906, the federal government appropriated over \$4,100,000 for the improvement of the Kentucky, but no permanent increase in the traffic of the river resulted (p. 36).

With reference to the relation of river commerce to the development of the tributary country, the author points out that as soon as rough trails were sufficiently improved to accommodate pack-

horses and wagons, they offered a shorter and safer passage to and from the Ohio and the interior settlements than did the Kentucky; thus traffic on that river was for many years insignificant (p. 48). During these years, situation on one of the great highways leading into the state was of more importance for industrial growth than location on the river. Commercially, the river towns compared unfavorably with the highway centers where the transmontane routes intersected those from the Ohio (p. 77). Because of their isolated position, the river towns were important chiefly as points of shipment for outbound freight (p. 78). Moreover, the introduction of the steamboat on the Ohio brought about serious conditions for the Kentucky River settlements, since large vessels could not navigate that stream, and to avoid rehandling, manufactures moved to the Ohio River; the preëminence of the central basin of the Kentucky became a thing of the past (p. 101). By the time that improvement was resumed on the river the Bluegrass counties had almost ceased to use it for commerce. Henceforth, it was the mountain region which was looked to as the chief source of traffic. But the improvement of this section was delayed to such a late date that the railroads offered a better means of communication than the improved river.

Limiting the area of observation to one stream, the author has had the opportunity to study intensively the effect of the improvement policy over a long period. In general, the conclusions reached in the volume are that "the benefit derived by commerce from the Federal slack-water system up to the present has not been commensurate with the sums expended" (p. 112); that "it is doubtful that the river commerce will be appreciably augmented by shipments from the coal field when the slack-water system is finished and navigation opened to Beattyville"; and that "the gradual absorption by the railroads of the mountain traffic renders the slack-water system of little value. As matters stand at present the improvement represents a waste of money, labor and engineering skill" (p. 120).

On the whole, the author has proved her contentions. The method of handling evidence, however, is often troublesome to the reader, since important proofs are usually included in the footnotes, and the reader obtains the idea that many of the statements in the body of the text are assertions. One would like to have a discussion of some of the larger matters relating to river improvement; namely, the questions of flood control, conservation of for-

ests, use of water for power purposes, and conservation of the soil in the valley of the stream. But of these topics the author has little or nothing to say.

ISAAC LIPPINCOTT.

Washington University.

Principles of Railroad Transportation. By EMORY R. JOHNSON and THURMAN W. VAN METRE. (New York: D. Appleton and Co. 1916. Pp. xix, 619. \$2.50.)

This is really the fourth edition of Johnson's *American Railway Transportation*, though it appears under a new title and a joint authorship. The book contains no preface, consequently there is no explanation given for the change of title and none is apparent from the contents of this latest revision.

Part I, The American Railroad System, though somewhat amplified and brought down to date, is essentially unchanged. Most of the old illustrations are retained, but a few new ones representing the latest developments in railway equipment have been added. Part II, The Railroad Service, required and has received a somewhat more complete revision. A still more thoroughgoing revision might well have been undertaken. For example, it may have been true thirteen years earlier that electrical engineers were handicapped by "their present incomplete knowledge of the force with which they are dealing," but in 1916 a more nearly adequate statement of what they have recently accomplished with electric traction might have been made. So also it seems hardly worth while to repeat the predictions of Dr. Weyl, made fifteen years ago, respecting the future development of passenger traffic and street railways, unless some progress has been made toward their fulfilment. As an offset to these criticisms, however, mention may be made of the very satisfactory exposition of the new regulations and rate systems imposed by the Interstate Commerce Commission upon the express companies.

Part III, The Railroads and the Public, dealing as it does with rate agreements, pools, etc., presents little that requires revision, as these things were largely historical in character when the first edition was published in 1903. The chapter on rate making in practice has been greatly improved, but the description of the principal rate systems of the country, introduced in this edition for the first time, are hardly adequate, and no mention is made of the recent struggle of the railroads for a general increase in rates and fares.

Part IV, The Railroads and the State, shows more changes than the preceding portions of the work. A new arrangement of the chapters has been made and the chapter on railway taxation has been omitted. In spite of this omission this part covers 72 more pages than in the last preceding revision, or an increase of 60 per cent. A considerable part of this expansion has been rendered necessary by the new legislation since 1906. Recent state and federal laws are fully analyzed, but scarcely any attempt has been made to estimate the effect of this legislation or to take note of the work of the Interstate Commerce Commission under its increased powers.

A book is somewhat like a house. It is possible to make a mansion out of a cottage by raising the roof and adding new rooms, but the results are never quite satisfactory from an architectural point of view. So in the revision of a book it is difficult to incorporate the new with the old in such a way as to secure unity of style and a proper proportion of parts. In spite of some obvious defects, however, this book will be found to be a more satisfactory textbook than the earlier editions were. It is probably the best work that we have in its special field and is well adapted for elementary instruction in railroad economics.

CARROLL W. DOTEN.

Massachusetts Institute of Technology.

Government Partnership in Railroads. By MARK WYMOND. (Chicago: Wymond and Clark. 1917. Pp. 178. \$1.50.)

Mr. Wymond's book is a plea for the establishment of a profit-sharing relationship between the railroads and the federal government. In the first place he analyzes the so-called sins of regulation. Through many repressive laws and regulations, state regulation has reduced the efficiency of the railroads and crippled their initiative. Federal regulation has damaged their credit by allowing the margin of profit to become too narrow to assure a fair return. The power of suspending rates for a period of eleven months prevents the prompt adjustment of revenue to operating expenses during periods of changing business conditions, and should be limited to a period of two months. The Sherman anti-trust law is unnecessary and injurious in its application to railroads. Passing on to consider the sins of the railroads, the author apparently concludes that they have been largely reformed out of existence.

The defects of the present system of regulation can be remedied (1) by a reorganization of the Interstate Commerce Commission, establishing eight subordinate district commissions of seven members each, having jurisdiction over territories coincident with the major traffic areas—these commissions should represent the mining, manufacturing, and merchandising interests (combined), the agricultural interest, railroad labor, railroad management, law, engineering, and finance; (2) by a government guarantee of a net revenue sufficient to pay the interest on the securities of all fairly capitalized railroads which serve the public beneficially—this to be arranged so that the least prosperous of such roads shall earn a fair return, the “profit” above this in the case of the more prosperous companies being divided between themselves and the government.

If a workable plan of regulation be not devised, then the country will be forced into government ownership of the railroads. American and European experience of state management of railroads is briefly (and superficially) reviewed and found unfavorable. Efficient management of so large a system as that of the United States would not be easily secured, if it could be realized at all. Rates or (compensatory) taxation would be higher, representative government would be menaced, labor difficulties aggravated, and so forth.

Mr. Wymond's proposal is an interesting one, but does not come with the force that might possibly have marked it if his discussion had been of a broader character. The discriminating reader is left in doubt as to the extent to which he can rely upon the author's guidance. Mr. Wymond's criticism of the Intercolonial Railway, his comparison of the relative cost of passenger travel in Europe and the United States, his explanation of the cause of the acquisition of the Western Railway by the French government are instances of defective or improper argument. State regulation is found bad on every count. Most balance-sheets have an assets as well as a liabilities side and the accuracy of Mr. Wymond's auditing would have been more easily recognized if he had borne this in mind. His affirmative arguments are often stated very positively, even dogmatically; objections are frequently ignored. This is not to say that he does not make many sensible and acute observations upon various points raised in his discussion. Perhaps Mr. Wymond should not be criticised for having failed to prepare a scientifically balanced essay when,

probably, he intended only to produce a more or less ephemeral tract for the purpose of influencing the public opinion of the moment. No doubt the evident conviction of the writer, the forcible way in which his opinions are presented, and the readable form in which they are clothed will cause it to serve this purpose quite effectively.

ERNEST RITSON DEWSNUP.

University of Illinois.

The Development of Transportation in Modern England. By W. T. JACKMAN. Two volumes. (Cambridge, England: The University Press; New York: G. P. Putnam's Sons. 1916. Pp. xxii, 820. \$7.25.)

This work is essentially a study of the development of roads and inland waterways in England from 1500 until 1830, prefaced by a brief description of conditions prior to the sixteenth century, and supplemented by a long account of the transition from canal and turnpike to railway. In the choice of his title, therefore, Mr. Jackman is somewhat pedantic, choosing to follow the nomenclature of the professional historian, who dates the modern period from the end of the fifteenth century. The reader will be disappointed if he expects to find here a treatment of the later development of transportation in England. It is true that the author's record of events reaches the middle of the nineteenth century, but this seems to be merely by way of postlude in order that the significance of the transition to the railway economy during the first quarter of the century may be better understood. In spite of this limitation, Mr. Jackman's field is quite extensive; and it is a field in which, taken as a whole, there is but one rival with any serious claim to consideration, namely, E. A. Pratt in his *History of Inland Transport and Communication in England* (1912). But Jackman has dug down into the primary sources more patiently and more deeply than Pratt.

A large share of the text is devoted to the history of the highways. The reputation of the Webbs' scholarly volume (1913) as the best account of the administrative development of the English highway system still remains unshaken. Jackman's particular contribution, and it is a valuable one, is in the accumulation of evidence, first, as to the state of the highways, and, second, as to the conditions and cost of travel and conveyance over the roads. The bibliography is especially rich in references to roads and turnpikes, though Miss Ballen's well-known bibliography is not

listed; this appeared, however, less than two years before the completion of Mr. Jackman's treatise. In the list of maps and road-books, one notices the absence of any reference to the (at the time) well-known *Travelling Dictionary* of Paterson.

Mr. Jackman's inquiry into waterway development in England is decidedly more exhaustive than those of his predecessors, from Phillips to Pratt, and very few sources of information appear to have been overlooked. In the list of sixteenth century statutes concerned with river navigation, the act of 1535 imposing a fine upon persons injuring the navigation of the Thames escapes mention; and, in the account of the river Exe, so does the closing, in 1290, of the opening hitherto left in the Countess Weir. Izacke, a useful authority on Exeter matters, does not seem to be included in the references. There must be ready recognition of Mr. Jackman's success in welding together an exceedingly scattered mass of material dealing with the progress of river improvement and canal building, enabling the student, for the first time, to gain really clear ideas as to the favoring and opposing forces that were at work and the significance of the economic results.

Any writer dealing with the transitional period of English railway history naturally invites comparison with John Francis. Jackman is not the stylist that Francis was, but he adds much to our enlightenment by the greater array of data that he presents. There are indications, however, that the same diligent care that marks the preceding chapters was not given to the checking up of authorities in this section. But, on the whole, the method of attack is praiseworthy. A few curious errors appear. It is difficult to understand why Anderson's *Recreations* should be referred to in proof of the statement that the possibilities of the application of steam to the railways were foreseen as early as 1800. Certainly, not by Dr. Anderson! R. L. Edgeworth, to whom the author does not refer, advocated, in 1802, the establishment of four-track railways on the great roads out of London, to be operated by stationary engines and chains. One is also surprised to find so careful a student committing himself to the year 1847 as the date of establishment of the Railway Clearing House—of course, he is in very excellent company in his error (the Joint Committee of 1872, Gustav Cohn, et al.), but really the evidence is very plain as to the correct date (1842). There is a puzzling reference to the *three* navigations that connected Liverpool and Manchester about 1825 (p. 522). Also to the

"Moreton" railway (p. 485). One must demur to the strict accuracy of the assertion that, up to the time of the opening of the Liverpool and Manchester line, all other railways, except the Surrey Iron Railway, had contemplated the carriage of but one commodity (p. 536); for the Stockton and Darlington project, though undoubtedly based mainly upon the carriage of coal, "contemplated" (and actually achieved) the carriage of other commodities, and even passengers. The Surrey Iron Railway, by the way, might well have been inquired into, for information concerning the utilization of this public tramway would have been very acceptable. On page 543, the text infers that, in 1835, there was continuous railway communication between Liverpool and Birmingham, but the Grand Junction Railway, affording the connection, was not opened until 1837. Relying upon Jeans, Mr. Jackman allows Parliament to have sanctioned, up to and including 1836, only 34 railway lines, of a length of 994 miles. Reference to a more reliable authority would have made evident that for "up to and including" should be read "during." In some places, though not in all, the author is too ready, perhaps, to accept the assertions of partisan pamphlets at their face value. Is the reader expected to know by intuition that the Leeds and Selby Railway is part of the North Eastern of today, or that the Manchester and Leeds is part of the Lancashire and Yorkshire? In comparing the relative taxation of stage coaches and railways, it is not altogether satisfactory to leave out of account the burden of local rates upon the latter. The movement toward amalgamation is hardly given adequate recognition; but, fortunately, Cleveland-Stevens (1915) supplies his lack in this respect.

Yet, on the whole, perhaps, Mr. Jackman's treatment of the early railway period fulfils well enough its intended purpose. The controversy between the respective advocates of canal and railway systems, the causes of the decline of the canal system, the advantages and evils arising out of railways, are all illuminated by his explorations into the ephemeral literature of the day.

In conclusion, attention should be called to the series of extremely interesting appendices, the preparation of some of which must have entailed considerable labor. The exhaustive bibliography has already been referred to. Its list of British Museum pamphlets bearing on the field is very welcome. As regards railway references, one wonders at the omission of Francis, Cohn, von Weber, Poussin, Steel, and others. Despite this or that omis-

sion or blemish, Mr. Jackman has reason to be satisfied with the achievement of an important piece of work that reflects great credit upon his research ability.

ERNEST RITSON DEWSNUP.

University of Illinois.

NEW BOOKS

- DUDENEY, F. M. *Exporters' handbook and glossary.* (New York: Pitman. 1916. Pp. 227. \$2.25.)
- DUNN, S. O. *Railroad freight rates and the farmer. An address before the Illinois Agricultural Society, July 6, 1917.* (Chicago: The author, Railway Age Gazette. 1917. Pp. 21.)
- FITZGERALD, M. S. *Before the Interstate Commerce Commission, in the matter of rates on classification of lumber and its products, and related subjects. A treatise in study, analysis and digest of the Esch plan. Submitted for Washington Pipe & Foundry Co., Portland Wood Pipe Co., Pacific Coast Pipe Co., and National & Pipe Co.* (Portland, Or.: The Arcady Press. 1917.)
- JACKSON, D. C. and McGRATH, D. J. *Street railway fares. Their relation to length of haul and cost of service. Report of investigation carried on in the research division of the electrical engineering department of the Massachusetts Institute of Technology. Research division bulletin, no. 14.* (New York: McGraw-Hill Book Co. 1917. Pp. xiii, 169. \$2.50.)
- MELIUS, L. *The American postal service, history of the postal service from the earliest times.* (Washington: Louis Melius. 1917. Pp. 108.)
- MEYER, B. H. *History of transportation in the United States before 1860.* (Washington: Carnegie Institution of Washington. 1917. Pp. xi, 678.)
To be reviewed.
- NELSON, J. H. *An analysis of the United States Shipping Board act.* (Washington: John H. Nelson. 1917. Pp. 17.)
- ROPER, D. C. *The United States post office; its past record, present condition and potential relation to the new world era.* (New York: Funk & Wagnalls. 1917. Pp. 382. \$1.50.)
- WALKER, G. M. *Railroad rates and rebates.* (Cleveland: Arthur H. Clark Co. 1917. Pp. 95.)
- ZUTTER, P. *La réorganisation des chemins de fer fédéraux.* (Paris: Fischbacher. 1917. Pp. 50. 1 fr.)
- Ocean shipping: the basic principles of marine transportation; with particular reference to the foreign trade of the United States.* Second edition. (Washington: Supt. Docs. 1917. Pp. 110.)

The railroad situation. (New York: Guaranty Trust Co. 1917. Pp. 29.)

The traffic library. Vol. 12, *The interstate commerce law; act to regulate commerce, principles of regulation.* Part 1. (Chicago: Am. Commerce Assoc. 1917. Pp. xvi, 389.)

Summary of commonwealth [Australia] statistics of transport and communication for the years 1906-1916. Transport and communication bulletin, no. 10. (Melbourne: G. H. Knibbs, statistician. 1917. Pp. 52.)

Trade, Commerce, and Commercial Crises

Course in Foreign Trade. EDWARD EWING PRATT, director. (New York: Business Training Corporation. 1916.)

VII. *Shipping. In Its Relation to Our Foreign Trade.* By EMORY R. JOHNSON and GROVER G. HUEBNER. (Pp. 156.)

VIII. *Financing.* Part I. *Financing Foreign Sales.* By ERNEST A. DELIMA. Part II. *Banking for Foreign Trade.* By J. SANTILHANO. (Pp. 173.)

IX. *Export Technique. A Series of Typical Export Transactions Based on Actual Orders.* By EDWARD LEONARD BACHER. (Pp. 129.)

X. *Foreign and Home Law. Its Main Points of Contact with Our Foreign Trade.* By PHANOR JAMES EDER. (Pp. 160.)

XI. *Importing. With Special Attention to Customs Requirements.* By CARL W. STERN. (Pp. 134.)

XII. *Factors in Trade-Building.* By CHAUNCEY DEPEW SNOW. (Pp. 143.)

These six little volumes constitute the second half of the correspondence course in foreign trade, the first six volumes of which were reviewed in a previous number of this REVIEW (December, 1916, p. 901). The last six volumes are of much the same general character as the first six volumes. *Shipping*, volume VII, gives a broadly elementary description of types of ocean carriers, ocean routes, and shipping facilities, and a brief explanation of rates, shipping papers, governmental regulations, and marine insurance. It offers barely an introduction to these subjects.

Financing, volume VIII, is in two parts. The first part discusses the methods employed in financing American exports and in granting credit. It also points out to the exporter the significance of recent changes in our banking system. Part two dis-

cusses the methods of trade financing and trade development by European banks. Three of the topics taken up in this section are of particular interest: (1) the *pros* and *cons* of the establishing of branch banks in foreign countries instead of dealing through correspondents; (2) conditions in debtor countries that influence banking operations connected with foreign trade; and (3) the probable relation of foreign investments to the future development of our foreign trade.

Export Technique, volume IX, is a handbook explaining, with illustrations of documents and copies of correspondence, the procedure of handling an export order in typical cases. It is concrete and visualizes the steps taken; hence it will undoubtedly be useful to students, who only too frequently have no definite conception of a "draft" or a "bill of lading."

Foreign and Home Law, volume X, is intended to serve as a guide "to help develop that business instinct in an export trader which will tell him when he can safely trust his own judgment or when he ought to be on his guard and either study the law carefully himself, consult his general lawyer or resort to a specialist." The author succeeds in this object. Significant differences in the legal systems and in the commercial laws of foreign countries are forcefully presented and the intricacies of foreign laws, in which an exporter may become entangled, are indicated.

Importing, volume XI, gives a brief, sketchy account of import trade methods and of rules to be followed in importing. Nearly two thirds of the volume, however, is devoted to a description of the customs service, customs procedure, and the administration of the tariff law.

Factors in Trade Building, volume XII, explains briefly the foreign trade services of the United States Department of Commerce and of other institutions such as the Pan-American Union, the Chamber of Commerce of the United States, the Philadelphia Commercial Museum, and the National Association of Manufacturers.

Although some valuable information is gathered together in these six volumes, they are in the main rather superficial.

MELVIN T. COPELAND.

Harvard University.

*First Annual Report of the State Market Director of California.
For the Year Ending December 1, 1916. (Sacramento:
1916. Pp. 110.)*

This report is a very comprehensive summary of the activities of the California State Commission Market, authorized by legislative enactment June 10, 1915. The commission consists of a director and a secretary whose chief ostensible duties are the maintenance of a commission market for "receiving . . . the agricultural, fishery, dairy and farm products of the state of California and the selling and disposing of the same on commission. . . ." Twenty-five thousand dollars was appropriated to the use of the market, but it is supposed to be supported, in part at least, by commission fees charged for selling California products.

As a matter of fact, no state commission markets have been established. The nearest approach to any actual marketing was the organization of the Northern California Fish Exchange, an association of retail and wholesale fish dealers who for a time co-operated with the director to increase the consumption of more fish, more days in the week, at much lower prices and much less waste than formerly. As a demonstration it was successful; as a permanent marketing agency the exchange soon failed because of the bad faith of one of the members, a wholesale fish dealer.

In general, the activities of the director have been confined to the dissemination of information concerning the supply and demand, methods of distribution and prices of California products; attempts to organize producers; assistance in finding markets for California products; and the preparation of legislative bills concerning the marketing of agricultural and fish products. The report shows that the peach growers, poultrymen, olive, prune and apricot raisers, dairymen, beekeepers, producers of citrus and deciduous fruits, hop growers, and hay, cattle, and rice farmers have all asked and received market advice and more or less assistance from the director. Evidence from other sources indicates that the commission is gaining the confidence of the farmers and the wholesome respect of at least some of the distributing agencies.

The methods of the market director are to be commended. He recognizes the efficiency and stability of most of the present agencies of distribution. He proposes few radical changes in marketing methods. His plea is for coöperation on the part of the producers and organization of the distributors and consumers. He purposes to bring about a better understanding of market relations, more complete and authentic information of market demands and conditions, more complete and intelligent control of

shipments to eastern markets, in order that a regular supply of standard, branded California products may be placed upon the markets in such quantities as the market requires. The self-sufficiency and competitive arrogance of distributive agencies is exemplified by the director's failure to bring together either the citrus associations or the deciduous fruit shippers of California (both of which are strong advocates of coöperative action) into unions organized to disseminate shipping information for their mutual benefit. The director has produced figures to show the losses which now prevail and which might be eliminated by organized distribution, and predicts that before long the wisdom of his plan will be apparent.

State market commissions are increasing in number. Approximately thirty states now have some form of market service under state authority. They have arisen in response to a clear call for definite market information regarding farm products on the part of producers and a protest against high prices by consumers. Some of the commissions are independent state agencies with wide powers, some are organized in state departments of agriculture, some in agricultural colleges, some in both. More will be established; and much more state control of prices and agencies of distribution will come to pass very soon. This report indicates some useful lines of service open to a thoroughly efficient and well-organized market commission.

ALEXANDER E. CANCE.

Massachusetts Agricultural College.

Merchandising. By JOHN B. SWINNEY. Modern Business Series, Vol. XIX. (New York: Alexander Hamilton Institute. 1917. Pp. xxi, 355.)

In the latter chapters of volume V (*Marketing Methods*) of this series the operating methods of the manufacturer in marketing his goods were outlined; the corresponding operating methods of the wholesaler or jobber and of the retailer are presented in this text on *Merchandising*; and the reader of the latter volume is assumed to know the contents of the former volume, as well as the principles of organization, management, advertising, salesmanship, accounting, credits, etc., as given in other volumes of this series. The data for *Merchandising* were assembled, by experienced investigators working under Mr. Swinney, largely by interview and special visits to the various business centers of the country, and by correspondence and questionnaires.

The text is divided into two parts: Part I, Wholesale Merchandising, part II, Retail Merchandising. The manner of treatment is practically the same for each: the selling field is analyzed, the selling policies are predetermined, the internal organization is outlined, and the four departmental activities of financing, buying merchandise, selling (including advertising) merchandise, and operating, are detailed. "Wholesale Merchandising" is made to include the operations of (1) the jobber proper, (2) the hybrid jobbers—manufacturing jobbers and semi-jobbers, (3) coöperative jobbing, and (4) agency jobbing—as done by selling agent, factor, commission merchant, and broker. Just as the treatment of "Wholesale Merchandising" proceeds from the ordinary jobber to the modifications made necessary in other types of specialized wholesaling, so the treatment of "Retail Merchandising" proceeds from the departmentized general store, as the "most suitable type for the general discussion of the different retail functions," to the "modifications necessary for specialty stores, large department stores, chain stores, mail-order houses, and coöperative stores," given in the latter chapters.

One of the special virtues of the Modern Business Series has been its clear-cutting of volumes; there has been a remarkably small amount of overlapping, the writers have hewn closely to their field. The introduction of this volume on *Merchandising* has forced a reduplication of materials; this overlapping is due to the fact that the sales department of the manufacturer and its operations as detailed in *Marketing Methods* covers in no small degree the matter of distribution through jobbers, agents, and retailers, and also to the fact that the sales organization and selling methods of manufacturer and jobber are similar. Much the same ground is therefore covered twice, with the results: (1) that both volumes must be read in conjunction to get a full treatment of jobbing, for many jobbing problems, as private brands, price maintenance, etc., are not treated at all or only slightly in *Merchandising*, and the author hurries through certain subjects and refers the reader to sections of *Marketing Methods* and *Salesmanship*; (2) that the author does not often bring out how a subject differs in its relation to jobber-selling and to manufacturer-selling; although there are exceptions, as on pages 95-96, where the different relation of manufacturer and jobber to retailer advertising is presented; and (3) that at times the author himself is confused, as on page 72, where to illustrate the cost of employing and

training salesmen the costs to a manufacturer rather than to a jobber are used. The reviewer believes that the Institute should stick to its former policy and make each volume complete in itself.

Inasmuch as discounts—trade discounts, cash discounts, and special discounts—have come to play such a very important rôle in modern merchandising it does not seem to the reviewer that the author has given this subject true emphasis and proportionate treatment. One of the most commendable features of the book is the accentuation of how merchandising policy (as to price, competition, credits, and service) affects the details of the sales methods and of the sales system of the trade. The book contains excellent material on the internal organization of the jobbing house, on automatic buying control, and on coöperative jobbing. It fails, as probably every text must, to present in a distinguishing and perspicuous way the business of jobber, selling agent, factor, commission merchant, and broker.

RAY B. WESTERFIELD.

Yale University.

Trade Fallacies. A Criticism of Existing Methods and Suggestions for a Reform towards National Prosperity. By ARTHUR KITSON. With a preface by FRANCIS STOPFORD. (London: P. S. King & Son, Ltd. 1917. Pp. xi, 286. 5s.)

From December, 1915, to February, 1917, a series of articles appeared in the British magazine, *Land and Water*. The purpose of these articles was to educate the general reading public along the line of possible trade and monetary reforms. This material, revised and somewhat expanded, now appears in book form under the caption given above. The author, Mr. Arthur Kitson, is descended from a family of English manufacturers, and has himself, for more than thirty years, been actively engaged in manufacturing in both Great Britain and the United States.

The trade fallacies discussed in the book may be conveniently grouped for purposes of this review under four general heads: the gold standard, the English banking system, free trade, and *laissez faire* in industry.

The author holds that the gold standard as it works out in Great Britain is inimical to the industrial progress of the nation. It results in making the amount of currency available dependent upon a relatively small store of gold. Every community demands a certain amount of currency to effect its exchanges. In Great

Britain because of the Bank Charter act gold, at the best an expensive tool, must be used as a medium of exchange. Anything affecting the gold reserve of the nation reduces the amount of currency available for current transactions and seriously hampers business. The present antiquated system should be superseded by an issue of notes based on national credit which would meet all internal requirements for a medium of exchange. Besides this a gold fund of say £100,000,000 should be held by the government to meet international payments, and this fund should be administered in the interests of the whole country. As proof of the advisability of establishing a national paper currency he cites the success of the present temporary issue of £1 and 10s notes. The Bank Charter act, Gresham's law, and the Legal Tender acts are seriously censured. To complete the monetary reform, Mr. Kitson suggests that the decimal system should replace the present fractional system of coinage.

The banking system in England has gradually developed into a private monopoly headed by the Bank of England and ably seconded by the London joint-stock banks. This monopoly has been used to create profits for stockholders and to that end has loaned largely to foreign interests, especially German. British industry has suffered severely and either has failed on the presentation of adequate security to get accommodation or has obtained such accommodation at nearly ruinous rates. The basis of bank credit is gold. Now when the gold reserve appeared to be threatened the only method of protection was to raise the bank rate and every time this has been done it has proved a great hardship to home industry and often a positive disaster. Three suggestions are made for reform: a mutual or coöperative system of banking, a thoroughly democratic competitive system, or a complete national system. The author seems to favor the first.

The idea of free trade held by many, namely that of barter or an exchange of goods against goods, says Mr. Kitson, is all folly in these days. Free trade is not an exchange of the surplus produced in one country for the surplus produced in another, but rather an exchange of goods and services for money and credit. Such an exchange may mean financial dominance of one nation by another. Through shrewdness, cunning, and trickery one nation may obtain economic supremacy over other nations, especially the smaller ones. Because of the growth of trusts, big banking and financial houses, and other forms of concentrated economic power

a nation under free trade is at a disadvantage. In these days economic power often also means political power, and here we have the greatest danger to national life. There is no doubt but that theoretically free trade is advantageous and has worked for industrial progress within national boundaries, but because of the chauvinistic policies of some nations it will not work internationally. Thus to meet "the war after the war" it is argued that Great Britain should adopt measures of protection through tariffs and close trade agreements with her allies.

Laissez faire in industry like laissez faire in government has proven socially worthless. Industries governed by narrow self interest have not developed that degree of efficiency, especially toward labor, which an enlightened age demands. Due to the exigencies of war the British government, through an expert board of control, has taken over more than 4,000 plants employing between 2,000,000 and 2,500,000 people. The result has been most satisfactory in every way; the industries involved have prospered and the employees have been greatly benefited through higher wages and better treatment. Through judicious guidance, the government has preserved private initiative and at the same time has gained all the benefits of centralized control. The author maintains that this system should be continued after the war, for experience shows it has resulted in the equalization of industrial and labor conditions throughout the country, has made possible high wages, continuous employment, better treatment of labor, and, in general, great industrial prosperity.

The author has a lucid style which makes the book easy to read. He has refrained from indulging in technicalities, and because of the popular treatment of the various topics he has been able to touch only the most significant points. The trained economic reader would wish for a more extended discussion in many places. Those who are familiar with the controversy waged over greenbackism in this country in the early seventies will find some old acquaintances in the arguments raised in this book. Undoubtedly the sound money extremists and reactionaries would be highly scandalized at the outspokenness of Mr. Kitson.

EVERETT W. GOODHUE.

Colgate University.

NEW BOOKS

BELLET, D. *L'alimentation de la France et les ressources coloniales ou étrangères.* (Paris: Alcan. 1917. Pp. 249. 3.50 fr.).

DUJARDIN, M. *La réglementation des exportations et des importations pendant la guerre.* (Paris: Morin & Millaut. 1917. Pp. 232.)

FILSINGER, E. B. *Trading with Latin America. Obtaining orders, filling orders, shipping orders, payment for orders.* (New York: Irving National Bank. 1917. Pp. 183.)

This particularly valuable and interesting volume has been produced in the hope that it may serve as a useful guide and handbook to those engaged in or interested in the trade relations between the United States and Latin America. Written primarily from the point of view of one contemplating entering this field of business the work presents a very concrete and definite analysis of Latin America trade possibilities. The book is to be commended not only for its great amount of helpful advice and pertinent suggestions to American merchants, but also for the very complete list of sources of additional information which it contains. Coming out at such an opportune time this volume should fill an important patriotic and commercial need in furthering our foreign trade relations after the war. On account of the scope of the text many topics are necessarily touched only in a suggestive manner. MARTIN J. SHUGRUE.

O'CONNOR, W. F. *Reports re cost of living. Sugar. Cold storage in Canada.* (Ottawa: Printed by J. de L. Taché. 1917. Pp. 39; 63. 5c. each.)

Mr. W. F. O'Connor has been working on the problems connected with the cost of living in Canada. His first report, dealing with *Sugar*, shows that the refiners in Canada have not made excessive profits during the war, and traces the rise of prices mainly to the shortage of raw sugar due to the latest Cuban revolution. He describes in detail the peculiar system of freight rates on sugar aimed to set the wholesalers on an equality in reaching retailers. The inconsistency of the refiners in refusing to sell to any retailers except the department stores is well brought out. While the refiners have technically violated the law concerning combinations, Mr. O'Connor holds that their agreements have been harmless.

In the report on *Cold Storage in Canada* are presented many interesting statistical exhibits, leading to the conclusion that "The operations of cold storage companies have been fairly conducted" although some companies have made excessive margins. Because of the increased business, however, Mr. O'Connor thinks that profits have been large, and margins should be reduced. But little would be gained by the consumer in the way of price reduction. It is interesting to note that the same commissioner who repeatedly emphasizes the importance of knowing costs, in the report on *Sugar*, should ignore costs in discussing the question of the profits of cold storage companies. These reports, while not notable for their logic, contain much interesting data.

FRANK H. STREIGHTOFF.

PULSFORD, E. *Commerce and the empire: 1914 and after.* (London: King. 1917. 7s. 6d.)

ROBERTS, G. E. *Property rights and trade rivalries*. (New York: National City Bank. 1917. Pp. 21.)

ZIMMERMANN, E. W. *Foreign trade and shipping*. (New York: Alexander Hamilton Inst. 1917. Pp. xviii, 356.)

The third annual report of the New York State Department of Foods and Markets for the year ending December 31, 1916. (Albany: Dept. of Foods and Markets. 1917.)

Accounting, Business Methods, Investments, and the Exchanges

Accounting Principles. By THOMAS W. MITCHELL. Modern Business, Vol. IX. (New York: Alexander Hamilton Institute. 1917. Pp. xix, 396.)

The book consists of twenty chapters, a table of contents and an index. Chapter 1 is devoted to a historical survey of accounting; chapters 2 and 3, to the theory of double entry bookkeeping; 5-7, to classification of accounts and description of the different accounting books and records; 8, to valuation for accounting purposes; 9, the trial balance; 10-13, discussion of assets and income accounts and financial statements; 14, opening and closing entries of a ledger; 15-16, labor saving devices and checks for accuracy; 17-19, interest computations and depreciation; 20, concrete illustration of opening books, recording transactions and showing results of operation.

There are several glaring shortcomings which are scarcely justified even in a book intended primarily for business readers. (1) Reference is made repeatedly to functional accounting, and the fundamental ideas of the book, especially those of valuation and depreciation, involve the functional view; but there is nowhere a clear presentation of the concept, much less an outline of classification based upon it. (2) In functional cost accounting, the so-called work order system of determining property and expense charges is practically an indispensable means, and it is extensively used by corporations; but it is not mentioned in this book. (3) In a chapter devoted to labor devices, there is not even a passing reference to the great tabulating machines like the Powers and Hollerith, which are essential to any extensive functional classification. (4) Although factory accounts are used in the chapter on application of principles, there is no systematic presentation of factory cost accounting, in spite of the functional cost view underlying most of the discussion.

In the preface, the author mentions his critical analyses of accounting principles in the light of economic fundamentals. It is true that the book shows clearer economic insight than the average treatise on accounting, but it is no less categorical and emphatic. The claim to new ideas introduced in accounting literature scarcely requires introductory notice. The "turned and unturned capital" as a concept is old; it has probably never been offered definitely as the basis of accounting because it would be arbitrary to make it so. The "allocated cost" idea in depreciation was excellently presented by Leake in his book on depreciation; it is fairly common property among teachers of accounting; it has been discussed by the reviewer in his classes without thought of originality. The author's view of cash discounts is merely an adaptation of Fetter's theory of value, and it was extensively discussed by the reviewer in the *Journal of Accountancy* in April and May, 1913.

A dogmatic positivism runs throughout the book wherever real principles are involved. It appears in the "turned and unturned capital" idea as the basis of accounting, the presentation of debits and credits, the discussion of valuation, the statement of depreciation and the idea of cash discounts. It is clearly impossible to enter here into a discussion of all these matters. But it may be worth while briefly to consider the treatment of depreciation.

The author's general view of depreciation is interesting, but not new, except perhaps as to terminology; but it is established emphatically instead of analytically. He considers depreciation as a matter of cost allocation and not value determination. He presents the entire purpose of depreciation accounting as the distribution to operation of capital costs which are periodically reincurred, instead of the more common view of the adjustment of values and the reservation of income as values are consumed in production. If the purpose of an accounting system is definitely to show functional costs, the author's view is correct; but not necessarily, for even the definition of costs would be a matter of specific business policy and not absolute principle. But may there not be other purposes than the showing of functional costs? Is not purpose a matter of operating policy rather than categorical principle? Why not, if business reasons demand, attempt to show values instead of costs?

But suppose we admit, as the reviewer does, that cost allocation is the more desirable view for ordinary business purposes, again the

author's particular method for determining the allocation is dogmatically asserted as solely correct in principle. His method may be best explained by use of his own illustration. He assumes the purchase of a new machine with an expected life of five years, with an equal annual operating efficiency, bringing a return of \$1,000 a year. The capital cost is viewed as the present value of the future returns—\$1,000 a year for five years discounted on a 15 per cent basis. The total cost was thus \$3,352.15, representing \$869.56 for the first year's discounted return of \$1,000, \$756.14 for the second year, etc. Now the author would distribute the depreciation over the five years, according to the above constituent parts of the total cost. He calls this the "allocated cost principle."

Admit that the first cost represents roughly the discounted value of expected future returns, why must a particular method of allocation follow as a principle? Why not make the distribution as well or better according to the value of the returns as they mature instead of their value when the machine was first purchased? Where is the absolute necessity in the latter procedure? But if we forget principle and consider desirable operating policy, is it reasonable to diminish materially the depreciation charges with the passage of time? Why charge considerably larger costs in proportion to production during the earlier than the later years of a capital instrument? Would it not usually be better to make relatively an even annual distribution?

If we adopt the cost allocation view, which is a matter of policy and not principle, we have then to determine further the policy of how specifically to make the distribution. Where is there any real principle involved? Various methods may be used, each having its special advantages and disadvantages. In general, there is a threefold choice: (1) there may be an even annual assignment, according to the so-called straight-line method; (2) an increasing annual assignment, according to the sinking-fund method; (3) a decreasing assignment according to the author's special "principle," or according to the better known balance-of-cost method. We are dealing here with a special aspect of joint costs; and the specific allocation of joint costs is, of course, always a more or less arbitrary matter.

JOHN BAUER.

Princeton University.

Credit and the Credit Man. By PETER P. WAHLSTAD. With the Collaboration of WALTER S. JOHNSON. Modern Business Series, Vol. VIII. (New York: Alexander Hamilton Institute. 1917. Pp. xviii, 342.)

This text has passed through several editions since its introduction into the Modern Business Series in 1914 by Mr. Wahlstad; the contents and arrangement have not, however, changed much. It covers Credit, Collections, and Bankruptcy. The author was assisted by Professor C. W. Gerstenberg in the preparation of the legal matters in the chapters on bankruptcy and the remedies available for the protection of merchandise creditors.

The purposes in view and the scope are stated as follows: Although the text "aims to cover the whole field of commercial procedure in both wholesale and retail business, special emphasis is laid upon the discussion of credit title and upon the analysis of credit information with a view to determining the existence of such title on the credit seeker's part"; its object is to shed "considerable new light upon old questions" and to advocate a credit policy which will commend itself as "safe and profitable in the conduct of a modern credit department"; and it "discusses the means by which the credit man is made a constructive force in business."

Its scope is delimited to the credit features of the wholesale and retail business; it does not concern itself with personal, public, financial, or bank credit; it is restricted to "mercantile credit." To the reviewer it seems too narrowed in scope; since jobbers, agents, and retailers procure credit at banks and their success or failure is directly conditioned upon accommodation at banks, differences of attitude and practice between the bank credit man and the commercial credit man become of great importance, and warrant special consideration of the bank credit man's position. The problem of any wholesaler or retailer is quite as much a problem of procuring credit as extending credit; and while only the extension of credit is handled by the wholesaler's or retailer's credit man, the bank's credit man passes upon credit which the wholesaler or retailer procures and is influenced by certain different credit factors.

In the light of the intention to lay "special emphasis . . . upon the analysis of credit information," it is decidedly disappointing to find but four pages and a half given to principles of analysis and these even consisting of statements found in nearly every

text on the subject. If any credit man were to be guided solely by the principles given, this "most important part of the credit department's work—namely, to analyze this information in order to reach an intelligent conclusion," would be poorly done. For instance, for the analysis of the merchandise inventory, suggestive interrogations are given but no positive guiding principles. Instead of presenting such guiding principles twenty-three pages of illustrations of analyses are given from which the novice is presumably to discover principles.

The author takes a firm stand against "credit insurance" and argues that security lies only in "conservative management." It is regrettable that he does not take a positive and aggressive stand for the "trade acceptance" and so help the propaganda of the National Association of Credit Men, the Federal Reserve Board and banks, and the leading bankers and others for the substitution of the trade acceptance for the open-book-account system. In chapter 10, he also fails to bring out the great influence which the wholesalers', retailers', and credit-men's associations have in determining and affecting the terms of sale in the trade. The work of the National Association of Credit Men is well described; in connection with it a statement as to the composition and internal organization of the association would prove helpful.

The most complete chapters are those devoted to the sources and collection of credit information and to credit protection. The use of financial statements, mercantile agencies, credit clearing, and the reporting by banks, attorneys, and selling agents are given in an instructive and interesting manner. The character and qualifications of the credit man are well portrayed. The text is a well-rounded and proportioned contribution to the literature on credit extension, and bears very intimate relations to the volumes of the Modern Business Series on *Salesmanship and Sales Management* and *Marketing Methods*.

Yale University.

RAY B. WESTERFIELD.

NEW BOOKS

ATWOOD, A. W. *The exchanges and speculation*. Modern business, vol. 20. (New York: Alexander Hamilton Inst. 1917. Pp. vi, 334.)

COLLVER, C. *How to analyze industrial securities*. (New York: Moody's Investors Service. 1917. Pp. 204. \$2.)

- COSTIGAN, G. P. *Cases on the law of property*. Vol. 5. *Wills, descent, and administration*. (St. Paul: West Pub. Co. 1917. Pp. xx, 781.)
- ELDRIDGE, H. F. *Making advertising pay; a compilation of methods and experience records drawn from many sources; with comment on the various phases of advertising by recognized authorities*. (Columbia, S. C.: State Co. 1917. Pp. 231.)
- FARRAR, G. P. *The typography of advertisements that pay. How to choose and combine type faces, engravings and all the other mechanical elements of modern advertisement construction*. (New York: Appleton. 1917. Pp. xvi, 282. \$2.25.)
- FEISS, R. A. *The spirit of scientific management*. (Cleveland, O.: Joseph & Feiss Co. 1917.)
- FICKER, N. T. *Shop expense analysis and control*. (New York: Engg. Mag. Co. 1917. Pp. 236, charts. \$3.)
- FIELD, C. C. *Retail buying; modern principles and practice*. (New York: Harper. 1917. Pp. 219. \$1.25.)
- GOULD, G. B. *The cost of power, a big business problem. A manual of valuable information for business executives*. Second edition. (New York: Fuel Engg. Co. of N. Y. 1917. Pp. 125, charts.)
- GRIFFITH, J. B. *Practical bookkeeping; a working handbook of elementary bookkeeping and approved modern methods of accounting, including single proprietorship, partnership, wholesale, commission, storage, and brokerage accounts*. (Chicago: Am. Technical Soc. 1917.)
- HERZ, E. *Controlling profits; simplified efficiency methods in store record keeping*. Third edition. (Chicago: Laird & Lee. 1917. Pp. 103. \$1.)
- HOTCHKIN, W. R. *Making more money in storekeeping*. (New York: Ronald. Pp. 364. \$3.)
- KLEIN, J. J. *Bookkeeping and accounting*. The College of the City of New York series in commerce, civics, and technology. (New York: Appleton. 1917. Pp. xiii, 453.)

The general method of presentation in this text is to develop and emphasize in part I the account as the fundamental concept in bookkeeping practice. "Subsequent divisions of the book are made the medium for the introduction of labor-saving devices, and for specialized phases of bookkeeping applicable to partnerships, corporations, and to small concerns employing incomplete or single-entry bookkeeping." One of the features of the text is the abundance of drill exercises included, especially those illustrating elementary bookkeeping practice. The author states that "the subject of bookkeeping, as treated in this text, might be understood without the solution of a single exercise." How complete this understanding would be as a practical matter is open to considerable question. Suitable

blanks, however, have been produced for the solution of the various exercises contained in the book. The essential value of the book is that, in a stimulating manner, it acquaints the student with the routine of bookkeeping practice. But, to whatever extent the instructor may wish to bring to the realization of the student the deeper and more significant aspects of accounting principles, particularly as concerns the fundamental financial statements, the balance sheet, and income account, to that degree must he supplement this text with other material.

MARTIN J. SHUGRUE.

LARSON, C. W. *Milk production cost accounts: principles and methods*. (New York: Columbia Univ. Press. 1916. Pp. xv, 60. 75c.)

LEFFINGWELL, W. H. *Report on scientific office management*. (Chicago: Shaw. 1917. Pp. 253, plates and charts. \$10.)

MUCKLOW, W. *Real estate accounts; treating of the proper classification, construction, and operation of accounts for the real estate business, including forms*. (New York: Ronald. 1917. Pp. xv, 357. \$4.)

NEWTON, R. L. and HUMPHREY, J. R. *A system of accounts for cotton warehouses*. Contribution from the Office of Markets and Rural Organization. United States Department of Agriculture, bulletin no. 520. (Washington: Supt. Docs. 1917. Pp. 31. 5c.)

PATON, W. A. and STEVENSON, R. A. *Principles of accounting*. Revised and enlarged. (Ann Arbor, Mich.: George Wahr. 1917. Pp. \$2.75.)

PEIRCE, F. *The human side of business*. (Philadelphia: F. Peirce & Co. 1917. Pp. 214.)

An explanation of the methods used by the author in training bond men.

SANDERS, T. E. *Saving and investing money*. (Racine, Wis.: Thrift Pub. Co. 1917. Pp. 201.)

SHEPARD, G. H. *The application of efficiency principles*. (New York: Engg. Mag. Co. 1917. Pp. 368. \$3.)

WARN, C. E. *Economic status of the public accountant*. (Dallas, Tex.: The author. 1917. Pp. 12.)

WEIL, A. W. *American copyright law, with especial reference to the present United States copyright act, with appendices containing forms from adjudicated cases, and the copyright laws of England, Canada, Australia, Germany, and France*. (Chicago: Callaghan. 1917. Pp. 985.)

Amortization. Some notes of interest to investors, executors, trustees, and beneficiaries under trusts. (New York: Guaranty Trust Co. 1917. Pp. 14.)

How correct costs have increased profits. Some illustrations from actual experience. (Boston: Clinton H. Scovell. 1917. Pp. 12.)

The knack of managing. System's new method of training men to manage. (Chicago: System. 1917. 5 vols.)

Titles of the volumes are: 1, Analyzing the job; 2, Planning the operation; 3, Organizing the work; 4, Handling the "help"; 5, Conserving and caring for the business.

The Merchants' Association of New York year book, 1917. (New York: Woolworth Bldg. 1917. Pp. 272.)

Poor's manual of public utilities. (New York: Poor's Manual Co. 1917. Pp. 2400. \$10.)

Sixteen hundred business books. Second edition, revised and enlarged to 2100 titles. (New York: H. W. Wilson Co. 1917. Pp. 232.)

Proceedings of the twenty-sixth annual meeting of the American Warehousemen's Association held December 6-8, 1916. (Chicago: Nickerson & Collins Co. 1917. Pp. 412.)

Uniform system of accounts for cities of the third class. (Albany: State Comptroller. 1917. Pp. 116.)

Capital and Capitalistic Organization

NEW BOOKS

CONYNGTON, T. *Corporate organization and management. A combination and revision by H. Potter of Mr. Conyngton's "Corporate organization" and "Corporate management."* (New York: Ronald. 1917. Pp. xxvi, 778. \$5.)

HALL, P. F. *The law of Massachusetts business corporations, excepting financial, insurance and public service corporations; including the cases in vol. 224 of the reports and legislation of 1916.* Third edition. (Boston: Little, Brown. 1917. Pp. cxi, 689. \$7.50.)

HARING, F. B. *Corporate interstate commerce business, being a treatise on the rights of corporations to extend their activities beyond the limits of the state where incorporated, without the necessity of complying with the foreign corporation laws of the several states.* (Chicago: Callaghan. 1917. Pp. ix, 809.)

STEVENS, E. G. *Civilized commercialism.* (New York: Dutton. 1917. Pp. 252. \$1.25.)

WHITWORTH, J. F. *The creation of corporations for profit in Pennsylvania. Supplement, 1905-1916.* (Philadelphia: T. & J. W. Johnson Co. 1917. Pp. xii, 77. \$2.)

Digest of public utilities reports annotated for the year 1916, including volumes 1916A-1916F. (Rochester, N. Y.: Lawyers Coöperative Pub. Co. 1917. Pp. 807. \$2.50.)

Final report of the joint legislative committee appointed to investigate the public service commissions. Two vols. (Albany. 1917. Pp. 2780.)

Public utilities reports annotated, containing decisions of the public

service commissions and of state and federal courts. 1917C.
1917B. (Rochester, N. Y.: Lawyers Coöp. Pub. Co. 1917. Pp.
1275; 1243. \$5 each.)

Labor and Labor Organizations

NEW BOOKS

- ATKINSON, H. A. *A rational wages system.* (London: Bell. 1917. Pp. 112. 1s.)
- CLOPPER, E. N. *Child labor in the sugar-beet fields of Colorado.* (New York: National Child Labor Committee. 1917. Pp. 176-206.)
- COLE, G. D. H. *Trade unionism on the railways.* (London: Fabian Soc. 1917. 2s. 6d.)
- CONNOLLY, J. *Labour in Ireland. Labour in Irish history the reconquest of Ireland.* (London: Maunsell. 1917. Pp. 383. 4s.)
- HOAGLAND, H. E. *Collective bargaining in the lithographic industry.* Columbia University studies in history, economics and public law, vol. LXXIV, no. 3. (New York: Longmans, Green. 1917. Pp. 130. \$1.)
- HOXIE, R. F. *Trade unionism in the United States.* (New York: Appleton. 1917.)
- PARKINSON, T. I. *A brief for the Keating-Owen bill.* (New York: National Child Labor Committee. 1916. Pp. 219-265.)
- SPOONER, H. J. *Industrial fatigue in its relation to maximum output.* (London: Copartnership Pubs. 1917. 6d.)
- WALTER, H. R. *Munition workers in England and France. A summary of reports issued by the British Ministry of Munitions.* (New York: Russell Sage Foundation. 1917. Pp. 48. 20c.)
- WARD, H. F. *The labor movement.* (New York: Sturgis & Walton. 1917. Pp. 199. \$1.25.)
- WEYFORTH, W. O. *The organizability of labor.* (Baltimore: Johns Hopkins Press. 1917. Pp. 277. \$1.50.)
To be reviewed.
- WEBB, S. *The restoration of trade union conditions.* (New York: Huebsch. 1917. Pp. 109. 50c.)
- WILLITS, J. H., editor. *Stabilizing industrial employment; reducing the labor turnover.* (Philadelphia: Am. Acad. Pol. & Soc. Sci. 1917. Pp. 246.)
- American labor year book, 1917.* Second Year. (New York: Rand Bk. Store. 1917. Pp. 384. 75c.)
- The boy in industry.* (London: His Majesty's Stationery Office. 1917. Pp. 46. 3d.)

Decision of the Supreme Court of the United States in the case of Paine Lumber Company, et al. vs. Elbridge H. Neal, individually and as secretary and treasurer of the Joint District Council of New York and vicinity of the Brotherhood of Carpenters, etc., et al. (New York: American Anti-Boycott Assoc. 1917.)

Further statistical information concerning output in relation to hours of work, with special reference to the influence of Sunday labour. Health of Munition Workers' Committee, memorandum no. 18; appendix to memorandum no. 5. (London: Ministry of Munitions. 1917. Pp. 17.)

Health and welfare of munition workers outside the factory. Memorandum no. 17. (London: Health of Munition Workers Committee. 1917. Pp. 9.)

Hours, Fatigue, and Health in British Munition Factories. Welfare Work in British Munition Factories. Employment of Women and Juveniles in Great Britain During the War. Bulletins of the United States Bureau of Labor Statistics, Whole Numbers 221, 222, 223. (Washington: Superintendent of Documents. April, 1917. Pp. 147, 66, 121.)

These three bulletins include the fifteen Memoranda published by the British Health of Munition Workers' Committee up to April, 1917, and make immediately available these very important reports. The contents of each Memorandum has been previously summarized in the various issues of the *Monthly Review* of the United States Bureau of Labor Statistics, beginning with May, 1916, and ending with the issue for January, 1917. A statement of the titles of the Memoranda will suffice to show their nature: Sunday labor, hours of work, statistical information concerning output in relation to hours of work, industrial fatigue and its causes, sickness and injury, special industrial diseases, ventilation and lighting of munition factories and workshops, the effect of industrial conditions upon eyesight, welfare supervision, industrial canteens, canteen construction and equipment, investigation of workers' food and suggestions as to dietary, and washing facilities and baths.

In addition, the bulletins contain the British and some French and Italian procedures adopted for the settlement of labor disputes during the war by which the avoidance of curtailment of production is sought. Extensive bibliographies are appended to numbers 222 and 223.

Coming as these reports do from the actual field of experience in connection with the war output of munitions, they serve as valuable and timely guides for American procedure.

EMERY R. HAYHURST.

Twenty-sixth quarterly report of the trades-union congress parliamentary committee. (London. 1917. Pp. 128. 1s.)

Money, Prices, Credit, and Banking

Banking. By MAJOR B. FOSTER. Modern Business, Vol. XVI. (New York: Alexander Hamilton Institute. 1917. Pp. xvi, 348.)

In this volume the author has undertaken the task of restating the principles of banking, of recounting the main facts in its development with special reference to the United States, and of describing and critically analyzing the principal features of the leading foreign banking systems of today as well as our own recently modified banking arrangements. While writing mainly from the standpoint of public policy, the author has included, in a well balanced fashion, three practical and semi-technical chapters, Bank Organization and Administration, Loans and Discounts, and Establishing Bank Credit, dealing with the business relations between banks on the one hand and their customers, shareholders, officers, and employees on the other. Such facts concerning our monetary system as would seem essential to a clear understanding of banking principles and operations have been introduced naturally and skilfully.

The book is, on the whole, logically arranged and well written. The matters of emphasis and proportion have been handled commendably. Well rounded and, in a reasonable measure, fresh and original treatment has been accorded such important chapter subjects as Classes of Banks, Operations of a Commercial Bank, The Bank Statement, Bank Notes, Deposits and Checks, The Clearing-House, Banks and the Government, Canadian Banking System, The Federal Reserve System, State Banks and Trust Companies. The last named chapter contains a full and timely account of the relation of the state institutions to the federal reserve system, and their objections to entrance.

A chapter on Banking in Europe is traditional but, to the reviewer, unsatisfactory. Facts relating to European banking developments of the last three years, not to say decade, are almost entirely ignored. The author should not have dwelt on the history and operations of the central banks to the great neglect of the nature and work of other constituent parts of the systems. Perhaps the omission of an account of the Scotch banks is justifiable, as is the failure to touch upon foreign and domestic exchange, the subject of another volume in the series of which *Banking* is a part.

A list of questions given at the close of each chapter is well designed to enable readers thoughtfully to review the chapter con-

tents. Bibliography, however, is lacking and bibliographical references along with all footnotes have been eschewed.

A few unimportant inaccuracies occur, chiefly as a result of attempting to generalize too broadly. Errors in print are inconsequential except, it may be, on pages 207 and 331.

To those desiring a short but fairly comprehensive survey of the subject the book can be recommended heartily, the more so because of a rare simplicity of style.

Dartmouth College.

CHESTER A. PHILLIPS.

NEW BOOKS

ANDERSON, B. M. *The value of money.* (New York: Macmillan. 1917. Pp. xxviii, 610. \$2.25.)

To be reviewed.

DUNBAR, C. F. *The theory and history of banking.* Revised by O. M. W. SPRAGUE. (New York: Putnam. 1917.)

FACHAN, J. *Projet de création d'une banque nationale. Institution financière, économique.* (Paris: Rousseau. 1917. 4 fr.)

HOLDSWORTH, J. T. *Money and Banking.* Second edition, revised to 1917. (New York: Appleton. 1917. Pp. xiii, 511. \$2.25.)

Although the first edition of this volume appeared as recently as 1914, a revision was imperatively called for, so marked has been the advance in banking legislation and so rapid the march of events in the world of credit and finance. Such recent legislation as the Federal Farm Loan act, the Clayton act with the Kern amendment, the Bill of Lading act, and the numerous amendments to the Federal Reserve act, have been given ample and careful, if not too critical, attention. Few chapters have not been modified according to the dictate of new law or practice, and an appreciable part of the work has been recast, notably the chapters on credit and the federal reserve system. The original arrangement, however, has not been radically disturbed. Reading references have been enlarged, statistics and other features have been brought down to date. The revision is well designed to render the book even more acceptable as a text than was the first edition three years ago.

C. A. P.

LANGLEY. *Daily balance interest tables on the basis of 365 days to the year; showing the exact interest for one day on any multiple of \$1,000, from \$1,000 to \$1,000,000, and from \$1,000,000 to \$1,000,000,000, computed at the rates of 1%, 1½%, 2%, 2½%, 3%, 3½%, 4%; for the use of national banks and trust companies.* Seventh edition. (Boston: Bankers National Supply Co. 1917. Pp. 15. \$8.)

MORTON, D. W. *Banking and bank accounting; an advanced set on the individual business practice plan.* (Chicago: Lyons & Carnahan. 1917. Pp. 112. \$2.40.)

- POTU, E. *L'unification du droit relatif à la lettre de change et au billet à ordre.* (Paris: Giard. 1917. 7.50 fr.)
- PRATT, A. S. *Pratt's digest of national banking laws, 1917.* (Washington: A. S. Pratt & Sons. 1917. Pp. xxviii, 660.)
- ROBINSON, E. L. *One hundred years of savings banking, 1816-1916.* (New York: American Bankers Assoc. 1917. Pp. 89. 50c.)
- TODD, J. A. *The mechanism of exchange.* (London: Oxford Univ. Press. 1917. 5s.)
- TREMAN, R. H. *Trade acceptances.* (New York: Federal Reserve Bank. 1917. Pp. 44.)
- WOLFE, O. H. *Practical banking.* (Chicago: LaSalle Exten. Univ. 1917. Pp. xi, 290.)
- Commercial banking practice. The law, rules and regulations governing acceptances, rediscounts and open market transactions of federal reserve banks.* (New York: National Bank of Commerce. 1917. Pp. 66.)
- An introduction to the character and service of a great American commercial bank.* (New York: National Bank of Commerce. 1917. Pp. 47.)

Public Finance, Taxation, and Tariff

The Financial History of Boston from May 1, 1822, to January 31, 1909. By CHARLES PHILLIPS HUSE. Harvard University Studies, Vol. XV. (Cambridge: Harvard University Press. 1916. Pp. ix, 395. \$2.00.)

Professor Huse has added to the very limited number of financial histories of our leading cities a painstaking study of the financial history of Boston from the time of its incorporation as a city in 1822 to January, 1909. There is perhaps no field of economic history in which it is more difficult, than in the field of public finance, to bring out in a clear and striking manner the dominant facts in relation to their determining influences. The mass of facts to be presented, largely in statistical form, is so great that there is a strong temptation to resort to some formal scheme of classification in order to make sure that the ground is thoroughly covered, with the result that the completed work takes on the form of a compilation of material rather than a historical interpretation. Such compilations are, of course, of great value. A well classified and thorough compilation is much more useful than an attempted historical interpretation based on an inadequate presentation of facts.

Professor Huse has endeavored to avoid this temptation by a division of the history into periods determined by the dominating influences successively at work. These are indicated by the headings of the chapters: From Town to City Economy, 1822-1844; The Building of the Waterworks, 1845-1859; The Preservation of the Union: the Great Land and Street Improvements: the Annexations, 1860-1873; The Beginning of the Park System, 1874-1886; The Subways, 1887-1908. The material in each chapter, however, is presented in accordance with a uniform scheme under the headings, Government, Expenditures, Receipts, Debt, and Financial Policy; and expenditures and receipts which bulk most largely in the discussion are again uniformly subdivided into sections, each dealing with a particular item of expenditure or source of revenue. This makes hard reading and gives the impression of a compilation from which it is difficult to form a clear picture of the period as a whole. This defect is remedied in part by the sections devoted to Financial Policy at the end of each chapter.

The growth of expenditure in Boston shows, as might be expected, the same general features as in other cities: a rapid growth at the time of transition from the town to the full-fledged city with its professional police and fire service, its paved and well-lighted streets, its sewerage system, its public water supply, and comprehensive school system; a transition which was accomplished in Boston just before the middle of the nineteenth century and was accompanied, as in other cities, by the establishment of a large and increasing permanent indebtedness; another period of rapidly growing expenditure and debt due to the Civil War and the period of inflated prices and extravagance to which it gave rise; followed by a period of declining per capita expenditure and debt after the panic of 1873; and, in the last decade of the century, by a new period of increasing expenditure and debt which has not yet reached its end.

Nor on the side of revenue does the history of Boston show any striking features which differentiate it sharply from other cities. The general property tax, levied in increasing proportion on real estate, constitutes the main source of revenue, yielding a fairly constant percentage (about 75 per cent) of the whole throughout the greater part of the period covered.

Appendices contain tables giving for each year the figures for expenditures and receipts, by separate items; the valuations and

rates of taxation; and debt and sinking funds. Each class of expenditures, except for waterworks (an important omission), is also further analyzed by years. The material in these tables might profitably have been used to show approximately the total expenditures for "governmental cost payments" and "outlays," as these terms are employed by the United States Census Bureau. Summary tables for selected four-year periods give average receipts and expenditures, except for interest, with percentage and, in the case of expenditures, per capita figures for each period. It would have been more useful, and involved no great increase of labor, to have given per capita and percentage figures for each year.

The chief omission which the reviewer has noticed is the failure to give a clear and comprehensive account of the finances of the waterworks, desirable both for itself and for its bearing on the interpretation of the general finances of the city. It would also have been useful to add a table showing in greater detail the elements such as land, buildings, bank stock, which have entered into the property assessment, and for which the reports of the assessors, in recent years at any rate, furnish the material.

There is an apparent discrepancy between the figures for receipts from sale of lands, page 380, and the figures for receipts from sale of property, page 369.

It is to be hoped that the number of studies such as this will increase rapidly. They furnish material which is absolutely essential to the financial history of the country as a whole.

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HENRY B. GARDNER.

The New Protectionism. By J. A. HOBSON. (New York: G. P. Putnam's Sons. 1916. Pp. xx, 153. \$1.00.)

The author directs his argument almost entirely against the suggested return of Great Britain to protection as outlined in the Paris Conference of June, 1916, and confines himself to testing the substance of the economic menace proposed and the validity of the measures suggested to meet it.

He is at his best when protesting that the compact, if adopted, would drive the Central Powers to enter into an economic alliance, toward which he denies that a single step has been taken; would render the trade relations of the Entente countries with neutrals more difficult; and drive into the arms of Germany the very trade the Entente is striving to secure and hold. Mr. Hobson's asser-

tion that the countries of the Entente cannot make themselves economically independent is refuted by Premier Lloyd George who said, on July 25, that Britain "intended to avoid its previous error and in the future would be able to support itself"; by Mr. Frederick C. Howe, who wrote in the *Century* for August, that "after the war is over England will endeavor to feed herself instead of being dependent upon America and Denmark"; and by Baron Rhondda, food controller of England, who declared on September 8 that "within a year the United Kingdom will be practically independent of imports so far as the chief food stuffs are concerned." If the United Kingdom should become able to feed herself, Russia would be compelled after the war, it would seem, to seek an outlet for her food products in Germany, whose economic annex she long has been.

In spite of the well established fact that behind nearly all German foreign trade has stood the German state and its militant policy of driving rivals out of business by a ruthless slashing of profits, the author regards German aggression "nothing but successful economic competition," and advances made by German trade and finance in all parts of the world "the results of private business enterprise."

Mr. Hobson revives the theory that "the general tendency of protection is to discourage energy, experiment and progress." This was written, it is true, before the United States entered the war; since which time we have been besought to save the allies with men, ships, aeroplanes, destroyers, and all supplies for the immense armies in the field. If the tariff under which the United States developed its industries had the effect Mr. Hobson says tariffs have, it is little short of marvelous that we are now assuming the laboring oar in nearly all branches of war activity. Certainly the ability with which Germany, a protectionist country, has fought the past three years, refutes the author's generalization.

Mr. Hobson claims too much by half for free trade, when he expresses the belief that "the good will shown to our cause by most neutral nations is to a large extent a half conscious acknowledgement of the superior liberality of our commercial policy." Does he ignore the violation of Belgian neutrality, the flagrant disregard for rights of neutral countries shown by Germany, and the instinctive admiration felt for the valiant fight made by France? And has he forgotten the almost universal lack of sympathy for

Great Britain during the Boer war, at which time "the superior liberality of our commercial policy" was the same as it is today?

Mr. Hobson further claims that free trade's contribution to the country's financial strength has enabled its citizens to bear the great economic burdens imposed by the war and to furnish the huge financial resources provided in the past two years, as well as to establish relations of credit in the United States and elsewhere resting ultimately upon our financial and commercial prestige. Yet as this review is being written it is admitted by the chairman of the British National War Savings Committee that the sales of securities which created those credits "are now practically at an end." The financial burden of the war has become too heavy and Great Britain has turned to the United States, a protectionist country, for help in the emergency. Instead of free-trade Britain being the banker for the enterprise at its most expensive stage, protectionist America assumes that onerous rôle, a circumstance which seems to require Mr. Hobson materially to reconstruct his claim.

Mr. Hobson refuses to admit what other eminent free-traders have conceded, that free trade has failed as a pacific agency. He not only refuses to admit any such thing but claims that while "British free trade could not keep the world at peace, it has helped to keep Britain at peace." Well may his reader ask, as he recalls the various wars in which Britain has taken part since 1846, Has it accomplished even that? Britain's war record since the repeal of the corn laws is not surpassed by that of any other country of considerable size or importance, save Russia, or perhaps Turkey. It was at war with Russia in 1854, with China and Persia in 1856, near war with the United States over Mason and Slidell in 1861, with the Ashantees in 1874; with Afghanistan in 1878; with the Zulus in 1879; engaged in the Egyptian campaign in 1884, and in the Boer war in 1899, not to mention the very critical dispute with the United States over the Venezuela boundary question. With that war record to her credit, it seems that the author claims a bit too much for the pacific influence of free trade upon British war propensities.

The reader who expects after a trenchant criticism of the Paris agreement to find suggested a constructive policy to take its place, will be disappointed to discover that all Mr. Hobson urges is economic internationalism as opposed to what he is pleased to call "the reactionary policy of nationalism." All he offers is

something not applicable to the belligerent countries—the most valuable markets anywhere to be found—but restricted to the so-called undeveloped and backward countries of the world. According to his plan equal admission and other trading facilities are to be accorded by all the Powers to foreign traders in all dependencies, colonies, protectorates, and spheres of influence.

But the most amazing portion of his program is the establishment of international commissions “to secure equality of treatment for the commerce, investments, and other property interests of the subjects of the treaty Powers in all backward or undeveloped countries not under the political control of any Power.” In these days when we are assured that the rights of small nations must be respected and the world is to be made safe for democracy, it is, indeed, anomalous to have it seriously proposed to deny to independent, though apparently at the moment backward, countries the right to make advantageous reciprocity treaties, a denial which is to be enforced by a league of strong, advanced nations against weak ones for the avowed purpose, forsooth, of depriving the powerful ones of the incentive to start wars. Strong nations are to be allowed the privilege of making special arrangements deemed advantageous, but weak economic ones are to be denied that privilege—which is a denial of justice, the pretended object of the program.

The author, undaunted by the failure of Cobden’s predictions to come true, presents with confidence unshaken this newer free trade (which he sees as the nucleus of a larger constructive internationalism) as the only possible security against future wars. Promises alone are presented at a time when experience has taught us afresh that no nation can maintain either independence or freedom when dependent upon the power of another.

The book gives many evidences of being a series of newspaper articles written at different times and with different purposes in view. It lacks coördination, containing many statements difficult, if not impossible, to harmonize. The program it presents expresses socialistic thought; but before it can be adopted, love of country must be swallowed up by admiration for internationalism.

JOHN BRUCE MCPHERSON.

The System of Financial Administration of Great Britain. A report by WILLIAM F. WILLOUGHBY, WESTEL W. WILLOUGHBY, and SAMUEL McCUNE LINDSAY. Introduction by

A. LAWRENCE LOWELL. Prepared under the direction of FREDERICK A. CLEVELAND. (New York: D. Appleton and Company for the Institute for Government Research. 1917. Pp. xv, 361. \$2.75.)

This volume has three authors, an Introduction by President Lowell of Harvard, was prepared under the direction of Dr. Frederick A. Cleveland, as editor, is published "under the auspices of the Institute for Government Research," whose chairman, President Goodnow of Johns Hopkins, writes a Foreword, and the investigation was financed by an appropriation from the Rockefeller Foundation. The Institute for Government Research was incorporated in 1916 and the foreword tells us it is "an institution of citizens for coöperating with public officials in the scientific study of business methods with a view to promoting efficiency in government and advancing the science of administration." Thus we have, supporting the book, three well-known and able investigators as authors, an editor, also well-known, especially for his interest in this field, two university presidents, an "institute," and a "foundation." Surely this is an imposing panoply. The reasons for all this array of authority seem to be two: first, the book inaugurates a series of publications which the Institute expects to present; second, it has a mission, namely to educate the American people to the advantages of a budget system in public finance.

We are told by the editor that the original plans of those interested in the establishment of the Institute were to make similar studies of many European countries, but these plans were interrupted by the war. Thus the volume deals only with Great Britain.

President Lowell, in his introduction, summarizes what is in the book in the following words:

After discussing the general principles that must underly sound public finance everywhere, the writers follow the course of financial action in England from the preparation of the estimates in the different departments, through their consolidation into the measure presented to Parliament, the procedure of the House of Commons thereon, the subsequent orders drawn on the Bank of England, the expenditure of the money, and the accounting therefor, showing the significance of each step in the process and its bearing upon what goes before and what follows.

In short, it deals with the administrative side of budget making.

Bearing in mind the brilliant speeches with which some of England's greatest statesmen have illuminated the Budget, and the

fascinating essays and reviews about budgets of various years, such as those by Northcote, Buxton, and Mallet, one has a right to expect, on opening the book, to find some interesting reading. In that expectation one is at once disappointed, for the book is formal and dry in the extreme. The reason for this dullness seems to be that the authors have chosen to avoid any reference to the substance of any budget, or to any of the political, social, or economic features involved; but have confined their attention to mere forms and methods, the machinery and technique of budget making. In short they have described minutely the shell of the nut in all its convolutions, but have entirely ignored the kernel. The choice of these limits has resulted in creating certain impressions which seem to me false and misleading and to which I shall refer below. President Lowell obviously felt this defect, for he tries to defend the authors against this very criticism by saying: "The casual reader may be surprised at the small amount of space devoted to the discussion of the appropriations in Parliament, but this is right, because, in fact, those debates relate to the political and not the financial aspects of the matter." The trouble is, however, that the two things are not separable, especially as is shown in the Conclusion, where the engrafting of the British methods on American political life is distinctly advocated.

It must not, however, be inferred that merely because the book is dry as dust it is not, also, to use a phrase common with reviewers, "an indispensable work of reference." It brings together, in handy compendium form, a large amount of data not readily accessible elsewhere, useful alike to the student of government and of finance. Together with Higgs's *The Financial System of the United Kingdom* it makes as complete an account of the subject as the ordinary library requires. The materials are well arranged and easy to find, and the standing of the authors is a guarantee of accuracy. After two preliminary chapters there are four chapters on the "estimates," the most copyable part of the British system. One of these is on their preparation and submission to Parliament, another is on their character and form, another on the appropriations in aid, and the fourth is on the modes of Parliamentary action. Then follow chapters on: The Disbursement of Public Funds, The Treasury Control over Expenditures, Office of Works and Public Buildings, Stationery Office, The Audit of Public Accounts, and the System of Financial Reports. Finally we reach the authors' goal in the chapter on the Budget.

As the book has a mission, namely to bring about the adoption of better budgetary methods in the United States, we are particularly interested in what the three authors conceive to be the nature and purposes of a budget. Strangely enough they disclaim any intent to define restrictively the term budget, "for," they say, "it is one which is used with many different meanings" (p. 255). Yet they virtually offer three definitions:

(1) "A budget is a definite plan or proposal for financing the business of a future period both with respect to revenues and expenditures" (p. 8).

(2) "The idea underlying the conception of a budgetary, as opposed to a non-budgetary, system is that in the former the effort is made, by those responsible for initiating financial measures, to consider both sides of the national account at one and the same time, or at least in their relation to each other, and to place them before the legislative branch where appropriations are requested, while in the latter, no such attempt is made" (pp. 255-256).

(3) "In England, it is the financial statement explaining the proposals made by the Chancellor of the Exchequer" (p. 256). Or, of course, by metonymy the term may be applied to the Chancellor's speech itself.

In the Conclusion there are recapitulated ten different features, called for the most part principles, of the English system which are recommended for introduction or adoption in the United States. In this set of principles, as in the above definitions, we find the authors intent again upon the form and not upon the content, concerned with the shell regardless of the meat.

Contrast their definitions, for example, with that of Stourm: "Le budget de l'état est un acte contenant l'approbation préalable des recettes et des dépenses publiques" (*Le Budget*, p. 4). Or with Bastable: "There is therefor a combination of the ideas of (1) a valuation of receipts and expenditure or a public balance-sheet, and (2) a legislative act establishing and authorising certain kinds and amounts of expenditure and taxation." Or Leroy Beaulieu's simple phrase "un état de prévoyance." We have to go back to the origin of the budget to get its fundamental characteristic. Leroy Beaulieu says: "L'origine de ces budgets ou états de prévoyance, c'est le droit qu'a la nation de refuser ou d'accorder des impôts: tout le système parlementaire a pour principe garantie cette faculté qui est aujourd'hui universellement reconnue aux contribuables."

The substance of a budgetary system—of what makes the British system of fiscal control so superior to ours—is nothing so purely formal as our three authors would have us believe. It rests on the existence of a ministry in control of all administration sprung from and responsible to the legislative body, a ministry that, to retain its leadership in Parliament, must justify its policies. Allot the executive and legislative functions to different persons as we do and you cannot have a budget system that amounts to more than a method of bookkeeping. Of what vital import is the formulation or explanation of a “financial program” unless he who formulates it possess also the power to carry it out? The Chancellor of the Exchequer may “open his budget” with clearness and eloquence, the estimates may have been made with the usual skill, but it is for naught until Parliament approve. The essential thing is that when he presents it he is voicing the intentions and policies of his party, of the party in power in Parliament, with votes enough, as Bastable says, to make it law. He explains the program not that “the Parliament and the people shall all have clearly before them the full purport of the problem” (p. 271 and p. 274) but because his leadership, and that of the entire ministry, in matters fiscal as in all others, can be maintained only by the continued support of a majority in Parliament. There is a real meaning, not mere clumsy custom or tradition, in the fact that in the British Parliament the two committees, the Committee on Supply and the Committee on Ways and Means, are both the House sitting in Committee of the Whole. Since the war, with leadership resting on things bigger than pounds, shillings and pence, votes of credit, without estimates, or with dummy estimates, so as to conserve the forms and conventions, and without any too strict accounting for the money spent, have largely taken the place of formal budgets, and even the “opposition” waived its rights to discussion of the budget.

In many of our American commonwealths some officer or board submits to each session of the legislature a formal list of estimated receipts and expenditures, which is occasionally a carefully prepared document. Usually the labor, the paper and ink, of such a budget are a total loss, for the legislature is not led by that officer. He derives his powers directly or indirectly from the same source as does the legislature, but not through the legislature. In rare cases some political upheaval will carry into office a governor sufficiently strong personally or politically to

be a leader of the people and to control a majority in the legislature, and in those rare instances if he have a fiscal program at all, something like a budget system may emerge for a short time. Our system may appear haphazard, but it is the haphazardness of true democracy, of the people handling their own affairs directly without "grants" to a Crown, or to ministers responsible to a Parliament. So long as we have the principle of complete separation of the law-making from the executive powers, the reservation of essential powers to the people themselves, and limited fixed terms of holding office, so long will it be impossible to get the technical advantages of a budget system based on the other political organization. As Professor Daniels says in his *Public Finance* (p. 365):

The clearcut policy which naturally results when the heads of departments, as in England, are themselves the parliamentary framers of the laws they afterwards execute cannot be secured under our system of government. Each plan of government has its drawbacks as well as its advantages. But it is futile to suppose that either will eventually prevail in both countries.

Democracy may sacrifice some degree of "efficiency" for the retention of something more worth while, namely liberty.

Incidental to this criticism is another, equally the outcome of the excessive concentration of attention on forms and methods, and that relates to the assumption running throughout the Conclusion (pp. 269 ff.) that a budgetary system is something quite apart and separable from the general political policies of the government. Quite the contrary; every item in the budget, if not the very existence of the budget itself, has its origin in political policy. The winning of the control of the purse by the Commons changed the constitution of England and brought the budget into existence. A budget recommendation made England a free-trade country, another in 1910 opened the way to the undermining of the old aristocracy through the new land taxes and resulted in constitutional changes. Social reform, old age pensions and so on involve new spending and new taxes. These are all things far bigger than forms, or "estimates." It is true, as President Lowell says, that "the executive cannot conduct the public finances properly unless it has developed within itself the appropriate machinery as a safeguard against extravagance and wastefulness." But appropriate machinery is dependent on the functions to be performed. A gas engine is always a gas engine, but one for an automobile is not appropriate for a boat.

Leroy Beaulieu remarks (*Traité de la Science des Finances*, Vol. II, p. 19):

The study of the budget raises the most interesting and the most delicate questions: questions political, such as the respective rights of each of the two chambers and of the executive power in the conduct of the finances; questions administrative, such as the best method of providing properly for the needs of the different services with the least infringement on the predetermined limits of the budget; and lastly, questions, purely financial, such as the means of preventing the waste and squandering of the public moneys.

But no one of these many sides can be taken by itself to be a safe approach to the complex matters involved in budget making.

University of California.

CARL C. PLEHN.

NEW BOOKS

ASCOLI, F. D. *Early revenue history of Bengal, and the fifth report, 1812.* (Oxford: Clarendon Press. 1917. Pp. 272. 4s. 6d.)

BRISSET, C. E. *L'impôt sur le revenu pour 1917-1918.* (Paris: Garnier. 1917. 1 fr.)

COLLINS, C. W. *The national budget system and American finance.* (New York: Macmillan. 1917. Pp. vi, 151. \$1.25.)

FARNET, G. *Les relations douanières entre la France et la Principauté de Monaco.* (Paris: Giard & Brière. 1917. 7 fr.)

FAVARGER, P. *La taxe sur la plus-value foncière. Etude du projet proposé par le conseil communal de Neufchâtel.* (Neufchâtel: Worlfrath & Sperli. 1917.)

FIELDHOUSE, A. and E. E. *Income tax simplified.* (London: Simpkin, Marshall & Co. 1917. 1s.)

FILLEBROWN, C. B. *The principles of natural taxation.* (Chicago: McClurg. 1917. Pp. xx, 281. \$1.50.)

The author of this book differs from most single taxers in important particulars. One peculiarity is a belief that professional economists are not necessarily intellectually dishonest and morally perverse, a conviction which is made plain in a graceful dedication of his book to the "Professors of Political Economy." Another peculiarity is an unbounded enthusiasm for Thomas G. Shearman and his *Natural Taxation*, in which he has perhaps stood too much alone in the past. His admiration finds its effect both in the title of his book and in the prominent place accorded the work of Shearman in the body of the volume.

Mr. Fillebrown's general position is already familiar to the readers of the REVIEW through the numerous pamphlets which have appeared during the course of his career as a propagandist and harmonist. The book is essentially a revision and enlargement of A

Single Tax Handbook for 1913, now "issued with the idea of permanence as representing the best authorities, early and late upon the development of the idea" [of the single tax]. Part I, dealing with The Authorities, sets forth the contributions of the orthodox: of Adam Smith, John Stuart Mill, Dove, Burgess, Macdonell, George, McGlynn, and Shearman. Part II, Side-Lights, presents material which has long been available in pamphlet form. In an appendix the author pays his respects to the heterodox group: to the Physiocrats, to Spence, Ogilvie, Paine, and Spencer.

The book will prove a very useful single-tax document, and Mr. Fillebrown has performed a real service to economists in calling attention to the need for a redistribution of emphasis in discussing certain aspects of the single tax. As is perhaps to be expected, where the material has been gathered from scattered sources, often from magazines avowedly propagandist in character, an occasional slip in statement has crept in. For example (p. 175), in discussing the Saskatchewan act of 1911, he states that "Regina, the capital city, at once took advantage of the act, so that in 1915 buildings were entirely exempted from taxation." As a matter of fact, buildings in Regina have never been assessed at less than 80 per cent of their value. On the whole, however, the book is of high character.

ROBERT MURRAY HAIG.

LAVERGNE, B. *L'union commerciale des alliés après la guerre. Hostilités douanières envers l'Autro-Allemagne. Tarifs préférentiels entre Alliés.* (Paris: Alcan. 1917. Pp. 77. 1.50 fr.)

This pamphlet is a fair example of the present state of mind of many European writers on economic and political topics. Animated by a spirit of animosity and distrust towards Germany, M. Lavergne not only joyfully and unreservedly accepts the resolutions of the First Economic Conference of the Allies in Paris but goes many steps farther in attempting to evolve a most drastic policy of tariff hostilities to be inaugurated at the conclusion of peace against the Central Powers. In the author's scheme, a rigid industrial blockade devised for the purpose of crippling Germany's basic industries will go hand in hand with a boycott of her finished products; an ostracized Germany will not longer stand in the way of the industrial expansion of France, and the latter will rise as one of the leading commercial nations of the world. Protectionism, according to the writer, emerges from this war not only justified but exalted. M. Lavergne advocates the levying of exorbitant export duties on metals which will be badly needed by Germany shorn as she will be of Alsace and Lorraine; these duties are advocated by him not only as acts of political and military expediency but also as measures of great economic value for the Allies.

The work is based on the assumptions that "the buying country renders to the selling country a service" (p. 10) and "that both from the standpoint of savings and of available money the selling country grows richer while the buying country grows poorer" (p. 11).

The author realizes that the establishment of an Inter-Allied Economic League may lead to tariff wars not only with Germany, which he welcomes because certain of victory, but also with neutral countries. In order to avoid the latter conflict he proposes a plan so childishy crude that one is inclined to question whether the author himself believes in its practicability. "We cannot take away from the neutrals the benefit of minimum duties," writes M. Lavergne. "Granted. But what can prevent us from giving our allies a rebate from the minimum duties themselves. . . . In so doing we will not retract any favors already granted to our neutral friends" (p. 37). A postscript indicates what little regard the writer has for these neutral friends.

Fortunately for France as well as for the rest of the world not all French economists and statesmen share the views of M. Lavergne.

SIMON LITMAN.

MILLER, J. D., editor. *Single tax year book (quinquennial); the history, principles and application of the single tax philosophy*. (New York: Single Tax Rev. Pub. Co. 1917. Pp. 466. \$2.50.)

NEWCOMER, M. *Separation of state and local revenues in the United States*. Columbia University studies in history, economics, and public law, vol. LXXVI, no. 2. (New York: Longmans. 1917. Pp. 195. \$1.75.)

OLIVER, J. W. *History of the Civil War military pensions, 1861-1865*. (Madison: University of Wisconsin. 1917. Pp. 120. 40c.)

To be reviewed.

POUGY, G. *Les emprunts de l'état ottoman*. (Paris: Jouve. 1917.)

SNARELY, T. R. *The taxation of negroes in Virginia*. Phelps-Stokes fellowship papers. (Charlottesville, Va.: Univ. of Virginia. 1917. Pp. 97.)

SYDENSTRICKER, E. *A brief history of taxation in Virginia*. (Richmond, Va.: Legislative Reference Bureau. 1915. Pp. 66.)

A series of thirty brief articles on the financial history of Virginia written for the *Richmond Virginian*. They cover the whole period from the establishment of the colony to the present time and, notwithstanding their brevity, constitute an extremely useful sketch, particularly of the license and corporation taxes. The original method of publication and the fact that the present pamphlet is a reprint which the author may have had no opportunity to revise doubtless explain numerous typographical errors, particularly in the matter of dates, against which the reader must be on his guard.

H. B. G.

The Fitch record of government debts, 1917 edition. (New York: Fitch Pub. Co. 1917. Pp. 374. \$10.)

New York state franchise tax on manufacturing and mercantile corporations; chapter 726, laws of New York, 1917, approved June 4, 1917. (New York: Guaranty Trust Co. 1917. Pp. 83.)

Proceedings of the seventh state tax conference, Rochester, N. Y., January 11 and 12, 1917. The New York State Tax Bulletin, vol. 2, no. 3. (Albany: 1917. Pp. 264.)

Contains report of the committee on the relations of state and federal taxation, of which Professor Seligman was chairman (pp. 26-59); and the report on income taxation as applied to business corporations (pp. 85-128).

Report of the United States Bureau of Efficiency for the period from March 25, 1913, to October 31, 1916. (Washington: U. S. Bureau of Efficiency. 1917. Pp. 27.)

Les instruments modernes de la politique étrangère. Les emprunts d'état. (Paris: Georges Roustan. 1917. Three vols. 48 fr.)

Population and Migration

Causes of Death by Occupation. By LOUIS I. DUBLIN. Bulletin of the United States Bureau of Labor Statistics. Whole Number 207. Industrial Accidents and Hygiene Series, No. 11. (Washington: Superintendent of Documents. March, 1917. Pp. 88.)

This bulletin covers the occupational mortality experiences of the Metropolitan Life Insurance Company, Industrial Department, for the years 1911, 1912, 1913. It analyzes the death records of 94,269 white males engaged in 44 specified occupations and 102,467 white females insured in the Industrial Department of the company and representing 7 occupations. For the males, the results are practically in agreement with Dr. Hoffman's findings in the Prudential Life Insurance Company as presented before the XVth International Congress on Hygiene and Demography in 1912 for 103,434 deaths. The study is not one of death rates as the numbers engaged in the living population were not available. Among the males, tuberculosis was the chief cause of death, "being responsible for 20.5 per cent of all deaths at all ages." The tables are important as they show the comparative length of life in the various occupations, *e.g.*, 69.9 per cent of coal miners' deaths occurred after the age of 44, as against 58.3 per cent in all occupations—the coal miner having a longer lease on work life. He is not so subject to the prevalence of tuberculosis, which, the author suggests, is in the nature of a relative immunity (over and above the offset due to the number of deaths caused by accidents). Thus, with each occupation discussed, many interesting conclusions are deduced. Male laborers (unclassified) constituted 11.4 per cent of the total death record.

The next highest group was "teamsters, drivers and chauffeurs" which constituted 6.9 per cent.

With females, 86 per cent were composed of "housewives and housekeepers" with "domestic servants" next, 4.1 per cent. For females, the chief cause of death was organic diseases of the heart (14.8 per cent). However, during certain age-periods, as for instance 15-24, pulmonary tuberculosis overshadowed all other causes of death, being responsible for 40.4 of the mortality, compared with 33.8 for males.

The author finds certain direct relations between the cause of death and certain occupations. But much more significant are the insidious relations brought out by the intensive studies of others which tend to explain, for instance, the high tuberculosis rate in certain dusty callings or sedentary occupations. Because secondary and terminal diseases supplant the original occupational disease, "it is of great importance that living workers be examined, and that the diseases from which they suffer be accurately recorded. Therein lies the great advantage of periodic examinations of workers."

Field investigators have been showing the enormous rate of *health hazards* in industries. Such studies as Dr. Dublin's from the *mortality* side, go one step further in the exact analysis of these wasteful events. It is now to be hoped that some investigator will be able presently to compile an accurate table of American *death rates* by which the number engaged in various occupations will be determined for a given period and compared with the number of deaths. Fourthly, we need, as Dr. Dublin and many others have pointed out, a determination of *sickness rates*. Here the total causal conditions for lowered output, absenteeism and labor turnover are going to prove the most informing.

EMERY R. HAYHURST.

Ohio State University.

NEW BOOKS

HIBBS, H. H., JR. *Infant mortality, its relation to social and industrial conditions*. (New York: Russell Sage Foundation. 1916. Pp. viii, 127.)

This small volume consists of six chapters dealing with various phases of the infant mortality problem, all of which have previously appeared as articles in scientific periodicals. The study was made with the purpose of assembling and interpreting the results of the various investigations of infant mortality made recently in the United States, chief among which are the Fall River investigation

made by the United States Bureau of Labor and the Johnstown investigation by the Children's Bureau. In addition the results of a hitherto unpublished study are given to the public. This manuscript study, which is drawn upon largely by the author, is based upon a house-to-house canvass in four wards of Boston made in the academic years 1910-11 and 1911-12 by a group of students in the research department of the School of Social Workers. Of this investigation the author had personal direction and he was also responsible for its final form. Unfortunately the results of the later investigations of the Children's Bureau were not yet available at the time Mr. Hibbs prepared his articles.

The study, which is statistical, is an inquiry into the causes of infant deaths. The causes are complicated and some of them are not readily susceptible of statistical measurement. Moreover, the data collected in the United States are at best meager and leave some phases of the subject untouched. In the absence of adequate American material the author introduces European data. No striking conclusions are reached. Like the English students of infant mortality he arrives at the conclusion that poverty and ignorance are chiefly responsible for infant deaths and that such factors as the employment of the mother, the age of the mother, the size of the family, housing conditions, and the milk supply are only secondary.

Of the six chapters, the first, which treats of the decline in the infant death rate during recent years, has the least satisfactory statistical basis, owing to the fact that the registration of births is too late a development to afford a basis for the computation of infant mortality rates over a period of years for a representative proportion of our population. This part of the study is therefore based largely on calculations per 1,000 living population under one year of age, and the conclusions that the infant death rate has declined in the United States more rapidly than the adult rate but less rapidly than the rate for older children are stated, very properly, as probabilities.

MARY LOUISE MARK.

MCCAFFREE, C. *Third biennial report of the commissioner of immigration for the state of South Dakota.* (Pierre: The Commissioner. 1916. Pp. 32.)

WENTZ, A. R. *The beginnings of the German element in York County, Pennsylvania.* (Gettysburg, Pa.: The author. 1916. Pp. 217. \$1.)

Report on child mortality. Cd. 8496. (London: His Majesty's Stationery Office. 1917. Pp. 116. 1s.)

Social Problems and Reforms

Social Diagnosis. By MARY E. RICHMOND. (New York: Russell Sage Foundation. 1917. Pp. 511. \$2.00.)

"Social diagnosis may be described as the attempt to make as exact a definition as possible of the situation and personality

of a human being in some social need—of his situation and personality, that is, in relation to the other human beings upon whom he in any way depends or who depend upon him, and in relation also to the social institutions of his community” (p. 357). This definition corrects a possible misunderstanding of the too inclusive title. The present book is a detailed study of social case work, potentially for all cases but more specifically for those treated by the three institutions now emphasizing such diagnosis—the charity society, the juvenile court, and the hospital clinic. In a brief sketch of “Beginnings” the author shows that expert social diagnosis is of very recent origin and that even now it is far from such standards and methods as would guarantee an acceptance in comparison with diagnosis in law or medicine. But in proportion to its development its value is being recognized and its importance assured.

The director of the Charity Organization Department of the Russell Sage Foundation has here undertaken to explain the principles and technique so far developed, in order that the rapidly increasing number of workers can have a more comprehensive guide for their own activity and for further improvement in their profession. The book is the product of many experts of wide experience: social agencies in different cities were asked to send in records, criticisms, and suggestions, many of which are given in the text and appendices; conferences were held in regard to cases and methods; two workers were engaged to study original case records in five cities for a year; parts of the book were directly prepared by associates in the Foundation; and the valuable bibliography gives the source of much of the illustrative material used. But Miss Richmond deserves the great credit for conceiving the need and character of such a book, for organizing the data and opinion from a multitude of sources, and for interpreting the principles cautiously as the tentative beginnings of a science in the making.

Part I deals with Social Evidence and the inferences to be drawn therefrom. Convinced that many students fail to realize different degrees of validity in evidence from various sources, the author has tried to meet this need by explanations and illustrations from case work itself and from law and medicine. The summaries at the end of each chapter and the later repetition of the main points render unnecessary some of the detail in the initial discussion. The author wishes especially to urge upon

workers the obligation for a self-critical search for the weak or missing links in one's own diagnosis. She also lays emphasis upon the need for imaginative insight and human sympathy, upon diagnosis as a means to treatment and not as an end in itself, and upon the final test of results in the improvement in the particular situation concerned.

Part II, Processes Leading to Diagnosis, is the main part of the book, and the most valuable. It consists of a study of the sources to be used in case work—the family, relatives, physicians and hospitals, schools, employers, documents, neighbors, social agencies, etc. These chapters make a noteworthy contribution, that on the Family Group representing unusual insight. A chapter on Comparison and Interpretation summarizes and applies part I, and the concluding chapter states the Underlying Philosophy in regard to individual differences and the “wider self”—the social relations which largely make an individual what he is and what he may be. It is surprising that the author does not give more prominence to the influence of heredity. Constant reference is made throughout the book to the necessity of acquaintance with the laws applicable to or needed for a given case; and the interdependence of case work and social reform is well emphasized:

There is, in fact, more resemblance than either would admit between the mental habits of the case worker who contentedly treats one individual after another, one family after another, without giving a thought to the civic and industrial conditions that hedge them about, and the mental habits of the reformer who is sure that the adoption of his particular reform will render all social case work unnecessary. Both ignore the complexity, the great diversity, of the materials with which they are attempting to deal (p. 369).

Part III, Variations in the Processes, consists of typical applications, in the form of questionnaires to be kept in mind by the social worker but to be used in a given case only for their “suggestion of alternative situations and explanations.” These questionnaires represent the experience of many experts and will probably set the standard for a great deal of such work in the future.

W. H. HECK.

University of Virginia.

NEW BOOKS

BASCOM, E. L. and MENDENHALL, D. R. *List of books and pamphlets on child welfare.* Reprinted from *Wisconsin Library Bulletin*,

- MARCH, 1917. (Madison: Wisconsin Library Commission. 1917. Pp. 14. 6c.)
- BOSANQUET, B. *Social and international ideals*. (New York: Macmillan. 1917. Pp. vii, 325. 6s.)
- BREND, W. A. *Health and the state*. (London: Constable. 1917. Pp. 354. 10s. 6d.)
- BRONNER, A. F. *The psychology of special abilities and disabilities*. (Boston: Little, Brown. 1917. Pp. 269. \$1.75.)
- BRUCE, A. A. *Property and society*. National social science series. (Chicago: McClurg. 1916. Pp. 150. 50c.)
- COOPER, L. F. *How to cut food costs*. (New York: The Survey. 1917. 80c.)
- ELMER, M. C. *Technique of social surveys*. (Lawrence, Kan.: World Co. 1917. Pp. 90, charts. \$1.)
- FLEAGLE, F. K. *Social problem in Porto Rico*. (Boston: Heath. 1917. Pp. 139. \$1.)
- FRANKS, T. Q. *The margin of happiness. The reward of thrift*. (New York: Putnams. 1917. Pp. ix, 238. \$1.50.)
The book is written mainly from the standpoint of a woman with large income and numerous servants. The author contrasts the business methods of the American man and the slipshod administration of the American home-maker. The plea is made that the woman be given a definite weekly or monthly allowance which is hers to spend and to save in part, if possible. F. H. S.
- HAINES, T. H. *The increasing cost of crime in Ohio*. (Columbus, O.: Bureau of Juvenile Research. 1917.)
- HARNUM, N. B. *Staying the plague*. (London: Methuen. 1917. Pp. 120. 1s.)
Written to enlighten public opinion on the subject of venereal diseases.
- HECHT, S., editor. *Probation and parole officer examination instruction*. (New York: Civil Service Chronicle. 1917. \$3.)
- HOPE, E. W. and CAMPBELL, J. W. *Report on the physical welfare of mothers and children. England and Wales*. (Dunfermline: Carnegie United Kingdom Trust. 1917. 2 vols.)
- KANDEL, I. L. *Federal aid for vocational education. A report to the Carnegie Foundation for the Advancement of Teaching*. Bulletin no. 10. (New York: The Foundation. 1917. Pp. 127.)
- KNEELAND, G. J. *Commercialized prostitution in New York City*. New edition, revised to date. (New York: Century Co. 1917. Pp. xii, 344. \$1.30.)
- LAPP, J. A. and MOTE, C. H. *Learning to earn*. (Indianapolis: Bobbs-Merrill. 1915. Pp. 421. \$1.50.)

This book is "a plea and a plan for vocational education." The authors have been diligent students of their theme, believe in it, and write of it with conviction and enthusiasm. Mr. Lapp, for years legislative librarian of Indiana, has served on various commissions for the study of industrial education, and he took a foremost part in framing the new vocational training law of Indiana. Mr. Mote is a newspaper man who has given much attention to the subject. An introduction by W. C. Redfield, Secretary of Commerce, expresses warm sympathy with the argument of the book.

Appearing, as it did, after the Great War had been some time in progress, this book reflects the general spirit of concern because of the defects of our system of popular education as it affects both individual well-being and national safety. Beginning with the consideration of some basic questions as to the needs in popular education (chs. 1 and 2), and as to the defects of our present system (ch. 3), the argument advances with more detail into a demonstration of the educational needs of those engaged in manufactures (ch. 4), agriculture (ch. 5), commercial business (ch. 6), and household industry (ch. 7). Through these, and in larger ways, vocational education, it is shown, bears directly upon the conservation of our national resources (ch. 8). Then is described the necessary educational process in prevocational training, in full time and part time schools, in correspondence courses and library direction, in vocational guidance, and in the training of teachers, for which the various private, state, and national agencies are required (chs. 9-16). Finally is discussed the relation of vocational training to the older teaching specifically for culture and to the development of good citizenship. The ideal school is pictured as one entirely under public control, and organized so as to meet completely the needs of a progressive democratic society. The book is written in a confident and inspiring tone of Americanism, which makes it excellent reading for any one interested in the educational aspects of social reform. Its value is enhanced by a well-arranged bibliography, by a list of organizations interested in vocational training, and by a full index.

FRANK A. FETTER.

LUTZ, R. R. *Wage earning and education*. (Cleveland: The Survey Committee of the Cleveland Foundation. 1916. Pp. 208. 50c.)

Eight special studies dealing with vocational education, which were previously published in the series of twenty-four volumes embodying the results of the Cleveland educational survey, are summarized in this final volume. The author claims that "The industrial education survey of Cleveland differs from other studies conducted elsewhere in that it bases its educational program on a careful study of probable future occupational distribution of the young people now in school," and undertakes to establish "the actuarial basis of vocational education." He proposes to supply educational facilities which will prepare young persons to fill the places now held by native-born adults. The risks of such an assumption of static social

and economic conditions are already apparent. It is impossible to believe that Cleveland can continue to import half of her male and a third of her female workers from foreign lands, or that in the future a high proportion of her skilled mechanics will receive their training in Europe. The experiences of the nations at war, as well as developments in older American communities, raise some doubts about the advisability of confining the vocational training of women to retail selling, to the sewing trades and to limited fields of the more mechanical forms of office work.

The plans for vocational education recommended by the survey staff do not differ materially from those already in operation in cities like Boston where there has been longer experience in the field; but, if put into execution, they may accomplish more because of the higher age limits of the Ohio compulsory education laws. The least satisfactory portion of the report is that dealing with vocational guidance and school placement. The value of public control in this field has been fully demonstrated in the British labor exchanges and extensive school placement work of Boston. The author's desire to adapt vocational education to the actual economic needs of the city cannot be realized without some such means of continuous adjustment between supply and demand. These studies of Cleveland's industrial life will prove most useful in carrying out the valuable recommendation of the survey staff that the vocational education courses include instruction about "economic and working conditions in wage earning and commercial occupations."

LUCILE EAVES.

MACLEAN, A. M. *Women workers and society*. (Chicago: McClurg. 1916. Pp. 135. 50c.)

Dr. MacLean has undertaken the difficult task of preparing for publication in one small, inexpensive volume a general survey of the complex relationships between wage-earning women and American society. Miss MacLean was a pioneer in that laborious form of research which requires that the trained investigator work side by side with the persons to be studied. She has also directed extensive factory welfare work and supervised country-wide investigations of conditions among women wage-earners. This intimate acquaintance with varied concrete situations as well as her familiarity with the literature of her subject gives weight to the general statements which constitute so large a portion of the volume. The book is to be commended for the sanity with which industrial evils and their remedies are discussed. Employers do not appear as wilful oppressors who can be charged with full responsibility for bad conditions, but as fairly well-meaning, if somewhat thoughtless persons, in process of escape from custom and the exactions of the competitive system into a "socialized" point of view which prompts greater attention to the health and happiness of their workers. A fine spirit of democracy shows throughout the discussions furnishing the chief arguments for the advocacy of trade unions, woman suffrage, and self-governing forms of welfare work, all of which tend

to make the women more worthy members of society because they promote intelligence, initiative, and capacity for mutual aid. While the book contains nothing that will be new to specialists in the field, it is admirably adapted for reading and discussion in clubs of less highly trained women and girls. LUCILE EAVES.

MERTON, H. W. *How to choose the right vocation; vocational self-measurement based upon natural abilities; the mental ability requirements of the fourteen hundred vocations, including: 362 professions, arts and sciences, 344 commercial enterprises and businesses, 700 trades and skilled vocations, with 720 self-testing questions.* (New York: Funk & Wagnalls. 1917. Pp. 302. \$1.50.)

MINER, M. E. *Slavery of prostitution.* (New York: Macmillan. 1916. Pp. xi, 308. \$1.50.)

This book is a model of popular presentation of a social problem. It has throughout a sound basis in the experiences of the thousands of girls whom the author has known and whose stories, told without sensationalism or striving for lurid effect, give vivid reality to the whole subject. It is entirely free from that bitter sex-antagonism which mars certain books written upon this subject by women. There is breadth of view, sanity, balance, a strong sense of social causation, a healthy but not blind optimism in all Miss Miner says. The arrangement is natural and effective. First come the stories of many girls who landed in the Night Court and thus came under Miss Miner's ministrations as probation officer. Out of this chapter naturally grows a study of the personal factors and a description of the girls, their birthplace and parentage, age and education, occupation and wages, their own explanation of their lives, their mental deficiency and general heredity. Then follows a judicial consideration of the social causes of prostitution; and all will agree with Miss Miner, as we go with these girls into their wretched homes, follow them into their lengthy, uninspiring, and underpaid work in store, kitchen, and factory, suffer with them the privation and distress of unemployment, as we appreciate the dangers they run in their natural craving for joy in living, that "we reproach ourselves that we have allowed them to go so long uncared for and unprotected." Then comes an excellent chapter on the White Slave Traffic and an illuminating one from inside on legislation and law enforcement. The remaining chapters, perhaps the most valuable in the book, deal with constructive work for the prostitute, including Miss Miner's own home for them called Waverley House, the need for suitable municipal houses of detention, probation work, the place of reformatories and farm colonies in a comprehensive scheme of treatment, the need of a campaign of prevention that shall deal with the causes described in her chapter on social factors, and a chapter on the Girls' Protective League which tries by a movement within the ranks of working women to protect those who are in danger. The title of the book clearly indicates its nature and it does convince us that prostitution is a horrible loss of personal free-

dom. The book holds itself strictly to its declared topic and does not wander into non-prostitutional forms of irregular sex-experience, nor does it attempt to treat of the sex problem generally. There seems reason only for praise for such a timely and admirable book.

HERBERT E. MILLS.

SEARS, A. *The charity visitor. A handbook for beginners.* Revised edition. (Chicago: Chicago School of Civics and Philanthropy. 1917. 50c.)

A new chapter on "Estimating a family budget," by Florence Nesbitt, has been added.

SIMKHOVITCH, M. K. *The city worker's world.* (New York: Macmillan. 1917. Pp. iv, 235. \$1.25.)

In this book one sees through the eyes of the director of Greenwich House the industrial family. As Mrs. Simkhovitch furnishes "a plain description of the facts of the city dweller's life, together with some indications of the evolutionary process going on at the city's heart," there is an atmosphere of truth, of thorough understanding, and of sound philosophy. With the facts that are presented, all persons who have been interested in the life of the working people are fairly well acquainted, but the arrangement and the interpretation are frequently original, and the synthetic treatment is a real contribution to social literature. The chapters are devoted to The Industrial Family, Dwellings, Standard of Living, Education, Work, Leisure, Health, Poverty, Politics, and Religion.

Mrs. Simkhovitch depicts loyalty as perhaps the greatest one virtue and force in the life of the family, in the relations of the young people, in politics, and in religion; in fact, this virtue is encountered in nearly every phase of life. Her chapters are pervaded with an ever recurring spirit of optimism that springs from an appreciation of the thoroughly sound qualities of the masses of the city dwellers. There is frequent emphasis on the conservatism and the suspiciousness of the industrial worker, and abundant evidence of his good sense. Yet Mrs. Simkhovitch clearly sees the dangers. The standard of living is not yet secure in many phases, education is not yet adjusted to democracy, good amusements for those of any age are very hard to find, poverty is deadening, women surrender to age too young. The crux of progress lies in rising wages. These are some of the themes which Mrs. Simkhovitch ably develops. The book is full of clever phrasing and keen interpretation.

FRANK H. STREIGHTOFF.

REED, A. Y. *Newsboy service. A study in educational and vocational guidance.* (New York: World Bk. Co. 1917. Pp. xxviii, 175. 90c.)

SCOTT, W. R. *Economic problems of peace after war. The W. Stanley Jevons lectures at University College.* (London: Cambridge Univ. Press; New York: Putnams. 1917. Pp. 134. 4s. 6d.)

STEWART, A. *Social problems. Outlines and references.* (Boston: Allyn & Bacon. 1917. Pp. vi, 233. 75c.)

STONE, G., editor. *Women war workers; accounts contributed by representative workers of the work done by women in the more important branches of war employment.* (New York: Crowell. 1917. Pp. 319. \$1.65.)

DE VESSELITSKY, V. *The homemaker and her outlook.* (London: Bell. 1917. Pp. xi, 118. 2s.)

WEYMSS, MRS. G. *Domestic service.* (Boston: Houghton Mifflin. 1917. Pp. 112. \$1.)

WOLFE, S. H. *Care of dependents of enlisted men in Canada.* Miscellaneous series, no. 10. (Washington: Children's Bureau. 1917. Pp. 56.)

Board of Public Welfare of Kansas City, Missouri. Seventh annual report, April 20, 1915, to April 19, 1916. (Kansas City, Mo.: The Board. 1917. Pp. 176.)

Building new schools for Dayton's children. (Dayton, O.: Dayton Bureau of Research. 1917.)

Commission on Building Districts and Restrictions, final report, June 2, 1916. (New York: Board of Estimate and Apportionment. Committee on the City Plan. 1916. Pp. vi, 299.)

High cost of living. Conference with delegates appointed by governors of states in re food and fuel supply and price. (Washington: Federal Trade Commission. 1917. Pp. 119.)

Apparently, with only a few exceptions, each delegate came to Washington with a sincere desire to see what suggestions for lowering the cost of living the other men could make. As very few had contributions to offer, they must have gone home disappointed. However, the Trade Commission may have obtained a better conception of its problem.

F. H. S.

Report on the increased cost of living of an unskilled laborer's family in New York City. (New York: Board of Estimate and Apportionment. 1917. Pp. 32.)

Report of the Richmond, Indiana, survey for vocational education. (Indianapolis: State Board of Education. 1916. Pp. 599, illus.)

Research progress facts. A year of governmental research with certain facts about our city, county, and schools, and their progress during 1916-1917. (Dayton, O.: Dayton Bureau of Research. 1917. Pp. 39.)

Second annual report of the city of Dallas, 1916-1917. (Dallas, Tex.: Dept. of Public Welfare. 1917. Pp. 48.)

Summary of child-welfare laws, passed in 1916. Miscellaneous series, no. 7. (Washington: Children's Bureau. 1917. Pp. 74.)

Thirteenth report of the Board of Tenement House Supervision of New Jersey for the Year 1916. (Trenton: The Board. 1917. Pp. 45.)

Insurance and Pensions

Workmen's Compensation. By J. E. RHODES, 2d. (New York: The Macmillan Company. 1917. Pp. 300. \$1.50.)

The production of a brief history of compensation legislation, and a simple and clear statement of the principles underlying it is the attractive task that the author sets himself. Being "claim examiner in the compensation and liability department of a large insurance company," Mr. Rhodes has a background of practical experience, and also a point of view that is occasionally manifest. Thus the matter of insuring the obligation to pay compensation is argued to a result that favors stock companies as against state funds or private mutuals more definitely than many students of the question are ready to accept. Then there is a degree of altruism suggested in the account of the safety campaigns of insurance companies that seems a little roseate; and the same may be said of the statement that insurance companies frequently settle doubtful claims, to avoid litigation, where the insured employer, if left to his own choice, would contest the case.

But there is a generous approval of the compensation system, and an anticipation of its liberalization both in scope and in the forms and measure of relief afforded, a consummation that is regarded as desirable from both the humane and the economic standpoint. Particularly timely are: the insistence on unlimited medical and surgical aid, looking to the earliest and fullest possible restoration of earning capacity of the injured workman; the recommendation that occupational diseases be made the subject of compensation along with accidental injuries, as usually classed; and the encouragement of accident prevention and other measures of conservation.

The first of the ten chapters of the book is devoted to an introductory survey, which traces briefly the development of our system of production and transportation, and the inadequacy of the old principles of the employer's liability to meet the resultant economic conditions, the consequence being that the workman was deprived of the liberties theoretically possessed by him. Then follows a discussion of industrial accidents and accident insurance, the latter a field in which the author is clearly at home; an account of the European background, limited to a review of the German and English systems; the development of the movement in this country; state legislation and its constitutionality; the

insurance of the compensation obligation; the administration of compensation laws; and some social aspects of the subject.

An appendix gives in some detail the history of the movement for a compensation law in New York, as illustrative of the situation generally; reproduces the pamphlet of the American Association for Labor Legislation on *Standards for Workmen's Compensation Laws*; and presents comparable digests of the various laws in force at the end of the year 1916. A bibliography and index complete the work.

The titles of the chapters as announced, and their fairly logical sequence, raise a hope of onward-moving discussion that is only partly realized. There is first a futile attempt to correct what the author calls the "inaccuracy" of restricting the term "employers' liability" to the earlier system, as distinguished from "its statutory successor, the compensation system," holding that they are "parts of the general legal system of employers' liability"; so that they should be considered merely as two branches of the same subject, distinguished as "the common law system," and "the compensation system."

Granting the identity of the principals in the adjustment of matters, the employer and the employee, and also the partial similarity of the results aimed at, the basic difference between a liability based on fault and a benefit based on status would seem to warrant the admittedly common "matter of usage" of the reprobated terms as distinctive. One suggests the liability of the employer charged with negligence; the other contemplates the compensation of the workman injured while in the status of employee. The author's criticism is the more unconvincing from the fact that he himself refers repeatedly to the fundamental differences between the two terms, as where he says: "The very basis of the compensation system is a legal recognition of the practical economic condition and a repudiation of the individualistic theory upon which the common law system of employers' liability is based." (P. 7; and see pp. 45, 161, 180, 214.) An impression of vagueness of classification is also given by designating laws relative to the safety and health of employees, and those regulating the employment of women and children as "that part of labor legislation which relates to employers' liability," including as the third group "a certain class of statutes which, appropriating the name of the subject itself, have gone under the name 'employers' liability' acts."

To this lack of definite demarcation of his subject may be charged a considerable expansion of the volume; but the loose construction of many of the sentences and the author's habit of interjecting numerous qualifying clauses as he goes along are probably more responsible, as well as rendering the perusal of the book much less satisfactory than would otherwise be the case. The comma is practically the only mark of punctuation used other than the period, and sentences of ten, twelve, fourteen, and even more lines move uncertainly and unassisted to their conclusion. Then too it seems difficult to dismiss an idea with a single, apparently adequate, presentation, repetitions being made sometimes in the same paragraph, and sometimes in sections more remote. These facts, with an occasional infelicity in the choice of an important word, suggest the phrase used by the hurried business man, "Dictated, but not read."

The freshness of the work is evidenced by a discussion in proper places of the Supreme Court decisions rendered March 6, 1917, on the constitutionality of the compensation laws of New York, Washington, and Iowa; but just above (p. 126) is noted the proposed amendment of the constitution of Oklahoma, with no mention of the fact that it was rejected August 1, 1916. A minor error appears where it is said (p. 141; *cf.* p. 252) that no law provides for a waiting period of more than two weeks; and while the law of Colorado was changed on April 23 to provide a two weeks period, the new law of New Mexico, enacted March 13, 1917, established a three weeks waiting time. And to say that "no State has any authority to pass legislation which will be effective beyond its own borders" (p. 65), is to put the matter baldly, to say the least, in view of the "full faith and credit" clause of the federal Constitution, and the numerous decisions thereunder.

It is with regret, therefore, that the conclusion is reached that the demand for a concise and logical account of the movement for workmen's compensation, and of the principles involved, is not adequately met by this volume; though its excellent forward-looking spirit, its satisfactory index, and its pretty full bibliography combine with the presentation of much material of interest and value to offset in a large degree the defects noted.

LINDLEY D. CLARK.

Washington, D. C.

A Comprehensive Plan of Insurance and Annuities for College Teachers. By HENRY S. PRITCHETT. The Carnegie Founda-

tion for the Advancement of Teaching, Bulletin No. 9. (New York: Carnegie Foundation. 1916. Pp. xii, 67.)

Mr. Pritchett's report differs from that of the Commission on Pensions of the City of New York (noted on page 916) about as a sermon differs from a scientific treatise. It is not stated that the experience of insurance companies, the advice of the Actuarial Society of America, and the work of named experts, actuaries, with special training in pension problems, have been called upon for advice. Elaborate formulas, tables, and charts stating the facts necessary for an intelligent study of the present pension fund and for its reorganization are not given. There is no statement that experience is the only basis upon which a sound fund can be constructed, or at any rate there is given no analysis of the life experience of professors in American colleges, although it seems to be taken for granted that such persons form an unusually long-lived class; and yet even this, which at times seems a postulate of the whole report, is questioned by the statement that the experience of the Foundation has been so brief as to make it unsafe to assume that the longer life actually experienced is other than a chance fluctuation.

It would have been possible for Mr. Pritchett to present an array of facts and calculations separate from any theories as to desirable pension systems had he chosen to do so. There is no doubt but that the brief experience of the Carnegie Foundation could easily have been amplified by asking leading universities to furnish for the benefit of the Foundation their experience for the last fifty years. There is no doubt but that Yale, Harvard, Princeton, and a large number of other universities would be glad to furnish, upon the request of the Carnegie Foundation, a statement of the age at which each of the teachers on their rolls had died, whether in service or after retirement, during the last fifty years. These data should have been analyzed and compared with the general experience of life insurance companies and reasonably trustworthy mortality tables could have been prepared for the college teaching profession, so that this presumably intelligent class could have been the basis for forming an intelligent judgment of the proposition of the Carnegie Foundation for Teaching. The very fact that the Foundation has in the past apparently had but a very slim notion of the financial burdens it was undertaking would have suggested, it would seem, that the present report be made as impersonal and as scientific as possible. In

considering pension systems for college teachers it would be well to have not only mortality tables for this special class compared with those for other classes, but also tables and charts showing the growth in numbers of the collegiate teaching profession so that some tentative extrapolation could be made with reference to the near future, and tables and charts indicating the rise in the scale of salaries so that again some estimate might be made as to presumptive future increase. With a sufficient assemblage of data, it would not be difficult for the Carnegie Foundation, or others, to estimate the probable superior and inferior limits of the financial burden of a system of pensions for college teachers. We should also be able to see how much advantage a mutual life insurance company for teachers would offer as compared with ordinary life insurance companies. If it turned out that teachers were unusually long lived so that there should be an outstanding advantage in life insurance, we could estimate how much disadvantage there would be in a mutual annuity arrangement; for it is apparent that longevity in a class, although advantageous to a mutual life insurance company, is disadvantageous to a mutual annuity company, and if the major part of the life insurance be term insurance, terminating at around 65 years, it is possible that the mortality curve should be such as to balance the advantages and disadvantages, or even overbalance the advantages.

When we come to theories in regard to insurance and annuities for college teachers, we may say that it is not at all certain that the ideal system for the teacher is to carry term life insurance to the age of 65 and accumulate out of its salary a fund from which an annuity shall be paid to him (or half annuity to his surviving wife) and which, in case of his early death, should be repaid to his estate; it may be held that it would be better entirely to disconnect insurance from investment and allow the teacher to insure his life and insure his annuity or half annuity to his surviving wife. It is considerably cheaper to insure an annuity than to make payments for an accumulation of a fund; however, there is not sufficient data available to discuss any proposal with satisfaction.

Shortly after the Carnegie Foundation for the Advancement of Teaching started its operations Dr. J. McKeen Cattell printed a series of articles forecasting the financial burdens of the Foundation and showing that the capital was insufficient to the burden.

Professor Cattell's analysis gains greatly in stature as compared with the analyses(?) of the Foundation itself, when we consider the past experience of the Foundation, its present plight, and its attempts to stand from under without admitting too much concerning its lack of foresight.

In regard to the whole question of pensions or annuities, the position of a corporation relative to its employees is very different from that of the individual employee. For the individual it is important to provide, even at considerable cost, for those dependent upon him and for his old age or disability. It is important for him to save or to insure in some form or other, even though his rate of interest be low and even if, through a rise in the cost of living (or through gold depreciation), his actual interest be negative. If a person twenty years ago put a sum of money in a savings bank, that sum with its combined interest might be able to buy less today than then; nevertheless the individual would be better off, for he is twenty years older and twenty years nearer disability or retirement and very likely has in the meantime assumed greater family responsibilities. For the corporation the question is very different. Many a college or other corporation could better afford to pay two dollars in pensions than it could afford to pay one twenty years ago, and it is not at all unlikely that, partly owing to the great influx of gold, partly owing to the great inflation of a world war, prices will so rise and wealth will be so redistributed that twenty years from now the corporation can better pay two dollars in pensions than it could now pay one dollar into a fund from which twenty years from now to pay the pensions.

The world has always had to carry the burden of its superannuated and of its young, and it has always carried the burden out of current income. Whether the widespread adoption of a compulsory insurance plan combined with old age pension paid for in advance is preferable to payments out of current income may be doubted. It may be that a better plan would be to pay small pensions out of current income, thus relieving the individual from the direst distress and leaving to him the duty of providing anything above this out of his own savings in whatever form of insurance or other preparation for the future he deems best. One difficulty of the pension system as at present adopted by the Carnegie Foundation and by the City of New York is the large portion of a person's final and presumably highest salary which

is paid to him on his retirement. To pay 60 per cent of a person's highest salary as a pension in reward to the pensioner toward the close of his life, when his family obligations are narrowing (for his children should then be self-supporting) is, I believe, to award an undue proportion to him as compared with that paid to the young man already several years advanced in his life work and likely as not already somewhat surrounded with a family. If a professor's salary is \$3,000, his retiring pension, under the Carnegie Foundation, is \$1,900, yet in those institutions which pay a salary of \$3,000 to their professors, a man may not reach a salary in excess of \$2,000 until he is well along in years, say thirty-five to forty.

EDWIN B. WILSON.

Massachusetts Institute of Technology.

NEW BOOKS

BLANCHARD, R. H. *Liability and compensation insurance. Industrial accidents and their prevention, employers' liability, workmen's compensation, insurance of employers' liability and workmen's compensation.* (New York: Appleton. 1917. Pp. xii, 394. \$2.)

To be reviewed.

ALEXANDER, W. *What life insurance is and what it does; a primer for laymen and students.* (New York: Spectator Co. 1917. Pp. 168.)

BARBOUR, R. P. *The agent's key to fire insurance.* (New York: Spectator Co. 1917. Pp. 321.)

BROOKS, C. E. *Insurance for salaried workers. Standards of life and pension insurance, with special reference to the problem of the teacher.* Reprint. (Berkeley, Cal.: Univ. of California Chronicle. 1917. Pp. 21.)

DOSKER, N. H. *Manual of compensation law, state and federal.* (Louisville, Ky.: Baldwin Law Bk. Co. 1917. Pp. xxii, 548. \$6.)

HARDY, C. S. *Fraternal insurance law.* (Los Angeles: Charles S. Hardy, Trust & Savings Bldg. 1917. Pp. 254. \$3.50.)

HORNER, W. M. *Training for a life insurance agent.* (Philadelphia: Lippincott. 1917. Pp. 133. \$1.25.)

LARTER, A. E. *The L. & L. rating system, designed to effect standardization of fire insurance rating, based upon an analysis of conditions contributing to the fire loss.* (New York: C. F. Shallcross, 84 William St. 1917. Pp. 80.)

MCCANNA, F. I. *The new era, being a survey of industrial accident compensation legislation of Europe and United States with special reference to the Rhode Island act.* (Providence: Sun Prtg. Co. 1917. Pp. 143.)

PHILLIPS, J. S. *President's annual address. With special reference to compulsory welfare insurance. Delivered before the national convention of insurance commissioners at St. Paul.* (Albany: State Sup't. of Ins. 1917. Pp. 17.)

STONE, J. T. *Problems concerning the accident and health insurance business.* (New York: Ins. Soc. of N. Y. 1917. Pp. 14.)

WOODBURY, R. M. *Social insurance: an economic analysis.* Cornell studies in history and economics, vol. 4. (New York: Holt. 1917. Pp. 171. \$1.25.)

Final report of the departmental committee on approved society finance and administration. Cd. 8451. (London: Wyman. 1917. 3d.)

Concerning desirable amendments in the financial scheme of the national insurance acts.

Fire Insurance Lectures Delivered before the Insurance Institute of Hartford, Inc., Seasons of 1914-15-16. Based on the Second and Third Years' Program of the Insurance Institute of America. (Hartford: The Insurance Institute of Hartford, Inc. 1917. Pp. 289.)

The Insurance Institute of Hartford is composed of "officers and officials of insurance companies and persons engaged in the insurance business." In addition to this volume of lectures it has published from time to time volumes on life insurance, liability and compensation insurance, and accident and health insurance.

The present volume consists of two parts. Part I includes lectures on water works, fire departments, woodworkers, fire insurance rating, and the standard policy. Part II is devoted in large part to a discussion of some special hazards in fire insurance such as chemical, tanneries, and metal-workers. This part also includes two lectures on automatic sprinklers, a discussion of the analytic system of fire rating, and agency organization and management. Mr. Edward R. Hardy, in his lecture on "The history and philosophy of fire insurance rating," gives an excellent summary of the development of schedule rating. Mr. W. B. Medlicott, in seven lectures on "The standard policy," discusses the chief clauses in the policy in a pointed manner. Mr. F. C. Moore, who has given much attention to special risks, treats in an equally satisfactory manner "Automatic sprinklers' protection."

The lectures are of an expository and informal character, designed primarily for those who are in the fire insurance business. They are, however, free in large part from technicalities and so are well suited for the student of fire insurance. Throughout there is evident the effort to express in as small compass as possible the essential features of the subject under discussion. This is both a merit and a defect. For those who are beginning the study of fire insurance, it will prove very satisfactory, while the more mature student will want a more complete discussion. These lectures were arranged, doubtless, with the first class in mind and they thus will

afford a good basis for the more detailed study of the subjects. This volume, as well as the preceding volumes, should be found in the library of every university which gives a course in fire insurance. There is a surprisingly small amount of good literature in English on the subject of fire insurance, if one measures this literature by the amount of the fire insurance business and the number of people who are directly interested in it. Little work of an educational character has been done outside of preparing for the business those who enter it. It is very probable that not a small amount of the difficulty which the fire insurance officials have with state and national legislatures is due to the general ignorance of the public as to the character of the business and its method of transaction. Therefore the work which the Insurance Institute of America is doing, and especially this Insurance Institute of Hartford, should be welcomed. It would be good public as well as good private business if there were in existence more such organizations.

W. F. GEPHART.

Negligence and compensation cases annotated. With pleadings and forms. Vol. XIII. (Chicago: Callaghan. 1917. Pp. xliii, 1187.)

Report of the pension funds of the City of New York. Part II. An actuarial investigation of the mortality and service experience of the special and general service funds for municipal employees. (New York: Commission on Pensions. 1916. Pp. xiv, 422.)

This report contains "the fundamental facts which are indispensable to the intelligent consideration of the city's existing pension plans, and upon which alone a sound, properly organized new pension system can be constructed." "It represents the results of a complete actuarial investigation of the nine existing pension systems of the City of New York, and furnishes the first comprehensive data ever available with reference to these funds."

"In previous reports it has been made clear that the present pension plans, which have involved already a disbursement of nearly \$57,000,000, and which now entail an expenditure of over \$5,000,000 a year, were put into operation wholly without forecast or intelligent thought of the future cost which the commitments assumed would involve."

A brief introduction signed by Henry Bruère, George W. Perkins, and others admirably reviews the volume. It points out that when the Pension Commission was requested to present a plan for reorganization of the funds, it was impossible to consider the problem intelligibly on account of a lack of facts; that it was necessary to obtain facts as a first step to devising a method for ascertaining the prospective cost of existing plans; that experience is the only basis on which a sound fund can be constructed; and that hence it was necessary to analyze the experience of the City of New York; that expert guidance had been secured; that the experience of England had been drawn upon; and that the work had been in

charge of Mr. George B. Buck, an actuary with special training in pension problems. This report is preliminary to future reports in which recommendations will be made dealing concretely with pensions for each class of employees and with methods for financing.

The report is adequately supplied with tables, charts, and theoretical formulas necessary to cover the different classes of pensions, and with further data and calculations looking to the necessities of reorganization of the funds. Although the work deals with special systems of pensions, it has a bearing on any system; and a study of the volume will undoubtedly be helpful to any one deeply interested in pensions of any kind.

EDWIN B. WILSON.

Reports of fire insurance companies, for year ending December 31, 1916. Twelfth annual edition. (Chicago: Spectator Co. 1917. Pp. 413, 43. \$5.)

Workmen's compensation law of the state of Delaware. Effective January 1, 1918. Ibid., New Jersey, revised with supplementary acts of 1917, April, 1917. (New York: G. I. Wilson & Sons. 1917. Pp. 32; 36. 25c. each.)

Workmen's compensation law of the state of Kansas, revised with amendments, July, 1917. (New York: Frederick R. Jones. 1917. Pp. 32. 25c.)

Workmen's compensation law of the state of South Dakota, effective July 1, 1917. Ibid., Texas, revised with amendments, April, 1917. Ibid., Utah. (New York: Feruss Press. 1917. Pp. 40, 39, 36. 25c. each.)

Pauperism and Charities

NEW BOOKS

LANSBURY, G. *Your part in poverty.* (London: The Herald. 1917. Pp. 126. 1s.)

SCHMID, C. A., and WILD, A. *L'assistance des indigents, légale et volontaire-organisée, en Suisse.* Two volumes. (Paris: Fischbacher. 1917. Pp. 376; 301. 16 fr.)

Thirty-eighth annual report of the state board of charity of Massachusetts for the year ending November 30, 1916. (Boston: The Board. 1917. Pp. 760.)

Socialism and Co-operative Enterprises

NEW BOOKS

BUBNOFF, J. V. *The coöperative movement in Russia.* (Manchester, Eng.: Coöperative Soc. Prtg. Co. 1917. Pp. 162.)

CALVERT, H. *The law and principles of coöperation in India, being the Coöperative Societies act, no. 11 (1912). With introduction, notes and appendix.* (London: Thacker. 1917. 6s.)

MONTEITH, D. M. *Socialism unmasked*. (San Bernardino, Cal.: The author. 1917. Pp. 270.)

REYNAERT, J. H. *The Eldorado of socialism, communism and anarchism*. (Orlando, Fla.: Reporter-Star Pub. Co. 1917. Pp. 86.)

SCUDDER, V. D. *The church and the hour. Papers by a socialist churchwoman*. (New York: Dutton. 1917. Pp. 133. \$1.10.)

TRACHTENBERG, A., editor. *The American socialists and the war*. (New York: Rand School of Soc. Sci. 1917. Pp. 49. 15c.)

A compilation of official declarations on war and militarism by the Socialist party since the beginning of the European war.

WALLING, W. E. and LAIDLER, H. W., editors. *State socialism*. (New York: Holt. 1917. Pp. 649. \$2.)

WOODAN, J. B. *Municipal ownership fails in U. S. A.* (Chicago: H. J. Gonden, Peoples Gas Bldg. 1917. Pp. 32. 25c.)

Coöperative Union Limited. Proceedings of the forty-eighth annual congress, 1916. (Manchester, Eng.: Coöperative Union. 1917. Pp. 855.)

Statistics and Its Methods

NEW BOOKS

COPELAND, M. T. *Business statistics*. Harvard business studies, vol. III. (Cambridge: Harvard Univ. Press. 1917. Pp. xii, 696. \$3.75.)

To be reviewed.

GILMAN, S. *Graphic charts for the business man*. (Chicago: LaSalle Exten. Univ. 1917. Pp. 62.)

PINTNER, R. and PATTERSON, D. G. *A scale of performance tests*. (New York: Appleton. 1917. Pp. ix, 217. \$2.)

RUGG, H. O. *Statistical methods applied to educational problems*. (Boston: Houghton Mifflin. 1917. \$2.)

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DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

REPORT ON ANTHRACITE AND BITUMINOUS COAL. In response to Senate resolutions adopted June 22, 1916, and April 30, 1917, the Federal Trade Commission transmitted to the Senate in June, 1917, a report on *Anthracite and Bituminous Coal* (Sen. Doc. No. 50, 1 Sess., 65 Cong., Washington, 1917, pp. 420).

The report describes fully the anthracite coal situation during the winter of 1916-17. As is well known, there developed during last winter a buying panic on the part of consumers, which proved more serious than any since the anthracite strike of 1902 (in which year mining operations were actually suspended for four months). This abnormal demand, the report brings out, was largely the result of artificial and psychological conditions. The imminence of a nationwide railroad strike in the fall created an intense demand for coal; the dealers naturally found themselves unable to supply this demand promptly; "scare" articles in the newspapers predicted a coal famine; and the outcome was a buyer's panic.

The railroad coal companies during this crisis exercised on the whole a stabilizing influence by adhering rather faithfully to circular prices, but many of the independent operators took advantage of the situation and charged exorbitant prices, often \$1, \$3, and in some cases \$5 per ton higher than their normal figures. In fact, some of the independent producers practically auctioned off their coal to the highest bidder, the price changing from day to day, and even from hour to hour. The most striking feature of the market, however, was the speculative activity of the jobbers, who in the anthracite industry buy largely from the independent operators. The jobbers, it should be noted, perform no physical service; they do not unload or store coal or deliver to retailers' wagons from a storage pocket as do the wholesalers. As a class the jobbers took full advantage of the abnormal demand. The majority of them realized double or treble their normal gross margins; and in the eastern markets individual sales were frequently made upon which gross margins of \$4 to \$6 a ton were realized, instead of the usual margins for eastern jobbers of 10 to 15 cents per ton. Moreover, coal was often sold by one jobber to another. On a random selection of 142 high premium purchases by retailers, 56 were found to have passed through the hands of more than one jobber. A number of these orders passed through as many as three or four hands, each jobber generally taking a large profit; and in a few in-

stances the same coal passed through the same jobber's hands twice. So far as the retailers of anthracite were concerned, their practice varied greatly in different communities. The necessity of buying premium coal to meet a portion of their demands naturally justified higher prices in many instances, though only too often these purchases of premium coal were used as an excuse for the charging of fancy prices on coal for which no premium had been paid.

The panicky condition of the anthracite market was not justified by the conditions of production. It is true that the quantity of anthracite sent to market from the mines and from storage was $3\frac{1}{2}$ per cent less during the coal year April 1, 1916, to March 31, 1917, than during the preceding year, yet it was 4 per cent greater than the average supply marketed during the three preceding coal years, including the excellent year 1915-1916. The commission held that all the anthracite demanded would probably have been supplied and without any marked increase in prices had not the trade played upon the public fear of a scarcity.

What of the prospects for 1917-1918? During the first two months of the coal year of 1917 (April and May) the output of anthracite was 24 per cent larger than during the corresponding period in 1916. This additional output should have materially increased the supply of anthracite available for household uses, yet as a matter of fact it did not. The explanation is to be found in the conditions in the bituminous and coke industries. The demand for bituminous coal and coke was unprecedented, and although the output of these commodities greatly increased during April and May, 1917, nevertheless it did not increase sufficiently to take care of the added industrial demands. The difficulty lay in the inadequate supply of cars. The bituminous coal mines already opened could easily have supplied all the coal that was needed had cars been available. The commission further found that the cars even when once loaded were often not promptly moved to the point of consumption and promptly unloaded. The natural result of these conditions, of course, was a decided advance in the price of bituminous coal. The price of coal to the railroads and other large consumers was generally advanced from 100 to 150 per cent, while the price to small consumers was often advanced from 200 to 400 per cent. These prices were so high that it became increasingly profitable to use anthracite coal for industrial purposes. The anthracite producers therefore increased their production of the smaller or steam sizes, with the result that the supply of domestic sizes used in the household trade failed to increase as rapidly as it would otherwise

have done. This explains why the increased output of anthracite failed to improve materially the position of the household consumer. Meanwhile stocks of anthracite coal were not being piled up as usual in the Northwest and in New England. (It was the failure to store coal in these sections which normally secure the major part of their supply by water that made it necessary for Judge Robert Lovett, when placed in charge of priority of shipments, to issue in August, 1917, as almost his first official act, an order to certain railroads and water lines requiring them to give the priority to shipments of coal to the Northwest, in order that the requisite stocks of coal might reach this section before the navigation season closed.)

The high price of bituminous coal in one important respect reacted unfavorably on the soft coal industry. It prompted the opening of new, high-cost mines, called in the industry "snowbirds" or "wagon mines." These temporary mines obtained, of course, a part of the inadequate supply of cars allotted by the railroads to the coal industry. But since these mines had none of the usual loading facilities, the cars were often held at the mines for several days, whereas at a properly equipped mine the cars could be loaded in a few minutes. The operation of these properties obviously curtailed production, and therefore represented economic waste. (Happily the proclamation of President Wilson fixing the price of bituminous coal at the mines will largely eliminate these temporary operations.)

To remedy the unfortunate state of affairs above described the commission, so far as anthracite was concerned, went to the limit of its authority. It announced to the trade what it regarded as reasonable maximum prices for anthracite coal at the mines; and it threatened to report publicly to the Senate the names of any producers charging prices that on the basis of their costs proved upon investigation to be unreasonable. It notified the anthracite jobbers what it regarded as reasonable margins for the service performed by them; and required all jobbers to render weekly reports to it. Offending jobbers were also threatened with special reports to the Senate. The retailers the commission could not reach in this way because of its limited powers and means, but it did send its agents to many cities to investigate complaints that unreasonable prices were being charged by the retailers. By these methods the commission succeeded in greatly reducing speculation and inordinate profits so far as the domestic sizes of anthracite were concerned. But it found that it could not control the steam sizes of anthracite so long as speculation ruled in the bituminous coal market. Moreover, it could not handle the bituminous coal

situation as it had handled the anthracite because the bituminous mines were so numerous, were located in such widely scattered districts, and produced so many different kinds of coal suitable for a great variety of purposes. The bituminous coal problem, however, had to be settled, since otherwise industrial and military activity would be retarded, if not paralyzed. The commission therefore suggested to Congress the measures that should be adopted to remedy the situation. It recommended: first, "that the production and distribution of coal and coke be conducted through a pool in the hands of a Government agency; that the producers of various grades of fuel be paid their full cost of production plus a uniform profit per ton (with due allowance for quality of product and efficiency of service)"; second, "that the transportation agencies of the United States, both rail and water, be similarly pooled and operated on Government account, under the direction of the President, and that all such means of transportation be operated as a unit, the owning corporations being paid a just and fair compensation which would cover normal net profit, upkeep and betterments."

Thus far these recommendations have not been adopted. The President of the United States under the authority granted to him by the Lever act (passed August 10, 1917) has fixed by proclamations dated August 21 and 23 the prices to be charged at the mines by the producers of bituminous and anthracite coal; and also the margins that may be added to these prices by the jobbers (not wholesalers). Almost at the same time he appointed Dr. Harry A. Garfield, President of Williams College, as Fuel Administrator. No regulations as to wholesalers and retailers have yet (September 15) been issued, but the Fuel Administrator has announced that the necessary measures will be taken as soon as possible to fix the wholesalers' and retailers' margins, and thus to determine the price to be paid by the consumer. Dr. Garfield's plan, as announced in a statement of September 7, is to appoint in each state and territory a representative of the fuel administration, and also a committee of citizens, these two agencies together to assume direction of the regulation of the sale of coal in their respective states. Each state representative, as soon as appointed, is in turn to designate a committee of citizens in each county of the state and in each city in the state having a population of over 2500, these local committees to act as the representatives of the fuel administration. Through these agencies Dr. Garfield expects to keep in touch with local needs and to establish a fair price for coal to the consumer. The licensing of all operators, wholesalers, and jobbers as

authorized in section five of the Lever act is promised by Dr. Garfield; and it is probable that the large retailers as well will be required to take out a license as a condition of dealing in coal (retailers with gross sales of less than \$100,000 per annum are exempted from the provisions of this section).

Whether these measures will prove effective remains to be seen. The situation is complicated, it should be said, by the fact that some 75 per cent of the bituminous coal output is already sold under contract, and these contracts if made prior to August 21 are not affected by the proclamation of that date. The contracts, of course, must be bona fide ones. Dr. Garfield has announced that the government will not allow itself to be defeated by men setting up spurious or questionable coal contracts to avoid the new price scale. The law, he said, was not passed for temporizing purposes, and all contracts will therefore be scrutinized with the greatest care. However, the contracts that are clearly bona fide greatly limit the quantity of coal that will remain to be sold at the prices fixed by the President. Recognizing this fact, Dr. Garfield has intimated that he will recommend the requisition, as provided for in section twenty-five of the Lever act, of the plants of those operators who do not make available their share of the supply of coal required to take care of the needs of domestic consumers. The administration thus holds the trump card, and the Fuel Administrator, judging from his utterances thus far, will not hesitate to make use of it. Nevertheless it would be dangerous to predict that the fuel problem is in a fair way to be solved. Should the war prove of long duration it may become necessary for the government to acquire the total coal output at the mines, as it is authorized to do by section twenty-five of the Lever act; and it may even become necessary for it to take over the coal mines, as Great Britain and the Russian Provisional Government have already done.

ELIOT JONES.

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THE FEDERAL TRADE COMMISSION'S REPORT ON COÖPERATION IN AMERICAN EXPORT TRADE. In its report on *Coöperation in the American Export Trade* (Washington, 1916, pp. 984) the Federal Trade Commission recommended that the German cartel system be legalized for American foreign trade. While the report in which this revolutionary proposal is made is undoubtedly the most important collection of data relating to foreign combines which has as yet appeared, it presents only one side of the case. On page 13, part I, appears this

significant statement: "Much of the information regarding foreign business organizations and foreign combines in these sources was originally furnished, directly or indirectly, by those interested in the organizations." Throughout the report the commission accepts at their face value all of the claims advanced by the cartel's advocates—neither verifying them by a field investigation nor attempting to determine how much of the trade expansion attributed to combinations is due to other factors. The commission not only draws its facts from interested sources but absolutely ignores the opposing facts, for, while claiming that the existing system of exporting is inadequate, it does not analyze its costs, service, or methods, saying on page 13, part I: "No detailed description is given of the agencies by which American export trade and that of other countries is carried on."

The commission does not prove that American exporters cannot compete with foreign combines. This claim is discredited by the steady growth of American exports. The statements from American consuls contained in part II of the report are the only thoroughly disinterested information regarding foreign combines presented by the commission—yet, little attention is paid to them. None of these consuls believe that American exporters are handicapped through lack of American export combines. All of them claim that American goods can be sold under present conditions provided price, quality, and service are right, the great obstacles being tariff provisions and the lack of American ships, banks, and foreign investments. The report most favorable to the cartels is that of the consul general to Turkey, but even he declares on page 141, part II, that our export needs are steamships, banks, and through bills of lading, and that if these were supplied Americans could compete "with the German system of combination which appears to thrive so well under a paternalistic form of government." Of the forty-three consuls reporting, nine state that they have *no knowledge of any combine* (pp. 117, 118, 177, 181, 217, 232, 236, 237-238, 242, part II); seven declare that the only foreign combines operating in their districts are either well-known American trusts (pp. 129, 133, 186, 230, part II) or the German Potash Cartel (pp. 183, 185, 239, part II); while four express the opinion that export combines are impractical (pp. 108, 176, 181-182, 185, part II).

The commission does not attempt to determine whether the small manufacturer cannot best market his product through independent exporters, importers, commission houses, and manufacturers' agents. I have analyzed this point in a paper which appeared in the *Economic World* of April 21. On pages 184, 374-375, part I, the commission

acknowledges that American export trade was built up by independent middlemen.

The commission does not consider the results of the control of export combines by the large producer and the financier. While the chart on page 62 and the text on pages 203-215, 273-279, 327-330, part I, and pages 3-89, 519-534, part II, conclusively proves that the cartel system has enabled a few banks to dominate German industry, the commission would apply the same system to the United States without giving a passing thought to the dangers involved.

The commission ignores the fact, which its own report proves, that every successful export combine has eliminated competition in domestic trade and that most of the combines cited were organized for one object—the instant removal of surplus production from the home market by means of dumping.

A reading of page 6, part I, gives the impression that combines are a large factor in British export trade, yet a careful study of the descriptive parts of the report, especially of pages 219 and 248, part I, bears out the well-known fact that England's vast foreign trade is carried on by independent concerns. Analysis also reveals that the English and Canadian export associations, of which so much is made, are either selling agents or trade associations of the type common in the United States. None of these would violate the American anti-trust laws, as they do not fix price, restrict output, or divide territory.

On page 6, part I, the commission declares that the English coal operators' combine "gives British coal its grip on the important South American market"; while on pages 332-345, part I, it argues that this combine is able to prevent the sale of American coal in foreign markets. These claims are flatly contradicted. First, by the statement on page 595, part II: "Apart from the quality of her coal and her geographical situation, England's position in coal export trade may be definitely ascribed to an adequate and cheap supply of marine transportation"; and second, by the fact that an examination of the tables on pages 584-587 shows that seven members of the English combines act as selling agents for eleven American coal producers.

Although the commission devotes pages 327-330, part I, to the description of the Rhenish-Westphalian Coal Syndicate, which it calls "one of the most important cartels in the Empire," it overlooks the vital fact mentioned by Consul General J. G. Lay on page 28, part II, that English coal has displaced German fuel in important parts of the *German market*.

On page 6, part I, the commission states: "In Japan an export

organization of textile manufacturers is rapidly obtaining the extensive cotton goods trade of North China." On page 269, part I, it mentions "other factors named as contributing to the success of Japanese over American goods." Business men will agree that these "other factors"—not combines—together with the skilful use of the small middlemen and the close adaptation of her textiles to the needs of the Chinese consumer are the elements which are really responsible for Japan's success. While on page 268, part I, the commission states that a former Japanese cotton export syndicate "broke up in 1912" it neglects to mention that Consul General Heintzleman reports on pages 224-225, part II, that this syndicate was driven out of business because the trade could be more efficiently carried on by independent middlemen.

The commission does not give the slightest consideration to the commercial effect of the rigid agreements and regulations which the proposed combines would enforce. With unlimited facilities it did not inquire into the effect of rigid trade agreements on Germany's foreign commerce.

The commission believes that combinations would increase "selling efficiency." This is the very heart of the trust question, for if the "economies of combination" are productive in foreign trade they would be doubly productive in domestic trade. Under these circumstances the entire anti-trust policy would be directly opposed to the public interest. Nowhere does the commission try to determine whether export combines would force growth beyond the point of maximum efficiency.

The commission does not devote a line of its report to the economic consequences of destroying individual enterprise, incentive, and responsibility in our foreign trade by forcing the businesses of countless independent business men into the control of export combines.

Most economists will agree that the foregoing establishes the superficial nature of this investigation and that almost any one of the omitted factors is of sufficient importance to weaken and possibly destroy the validity of the conclusions reached. Yet as a result of this "comprehensive report" Congress is about to legalize practically unrestricted combination in a large part of the nation's business.

W. P. GOEMANN.

CO-OPERATIVE MARKETING ORGANIZATIONS AMONG FARMERS. Within the past two years the Office (now Bureau) of Markets, of the United States Department of Agriculture, has issued several bulletins on co-

operative organization embodying the results of studies made by its employees. Most of these deal with accounting systems for the various types of organizations. The purpose of the bulletin on *Coöperative Purchasing and Marketing Organizations among Farmers in the United States* (Washington: United States Department of Agriculture, Contribution from the Office of Markets and Rural Organization, September 19, 1917, pp. 82) is to present the statistics of agricultural co-operation by states and types of organization; to describe briefly the various types; to give a short account of a few representative associations; to discuss the methods of financing and the business practices of the various types of associations; to summarize and digest the co-operative laws of the several states; and to explain the provisions of the Clayton anti-trust act with reference to farmers' organizations. A selected list of references on coöperation, chiefly in the United States, is appended.

The data upon which the report is based have been in process of collection for some years. Most of the figures refer to 1914 or earlier and practically none of the facts are of later date than 1915. Unfortunately, but perhaps necessarily, the reports do not refer to any one year. Of the 5,424 organizations considered, about 16 per cent reported their statistics for 1912, 55 per cent for 1913, 50 per cent for 1914, and 10 per cent for 1915. The report deals very fairly with these statistics, however, and despite the tremendous recent development of coöperative activities the reports are, doubtless, fairly typical.

The extent of these organizations is striking. The corrected list used by the Department of Agriculture includes 12,300 associations distributed over the entire United States. From these 5,424 reports were received: 1,637 are grain elevators, 1,708 are creameries and cheese factories, 871 fruit and produce exchanges, 213 cotton associations, 275 stores, 96 live stock, 43 tobacco, and 581 miscellaneous associations. The membership is approximately 661,000 and the annual volume of business \$626,000,000. The average member does a business of \$946 per year, varying from \$241 for coöperative store members to \$1,856 for members of one cotton association.

The volume of business per organization shows that many of them are substantial business concerns. The average elevator reports an annual business of \$143,000, fruit and produce and cotton associations \$161,000, tobacco associations \$157,000 and live stock shipping associations \$99,000. The corresponding figures for 1916 are doubtless very much greater on account of the tremendous advance in the values of farm products. The figures above quoted are for individual local

organizations. The great central exchanges have much greater turn-overs. The California Fruit Growers' Exchange reports a business of \$27,700,000 for the year ending August, 1916 (for 1917, \$47,700,000); and nine fruit and produce exchanges do an aggregate business of more than \$42,000,000 annually.

The report points out that about one half of these organizations, although coöperative in spirit, intent, and practice, are formed on the joint-stock plan. Nearly 70 per cent of the elevators and 80 per cent of the cotton associations are joint-stock corporations. This is due in part to the capital requirements of the enterprise, and in part to the lack of adequate coöperative laws in many states.

The chapter on methods of financing is interesting and important. In spite of their business stability and commercial importance the farmers' elevators pay high rates on loans from banks and one third of them can offer no credit acceptable to bankers except the personal notes of the directors. Many still borrow from commission firms. Coöperative creameries and cheese factories have a better financial standing with banks but, taken as a whole, banks have not accorded farmers' organizations as favorable credit terms as organizations of their size and commercial integrity would seem to deserve.

The digest of state coöperative laws is not complete, but it shows that thirty states have made some provisions for the incorporation of coöperative associations. The digest is inadequate (Vermont, which has had a coöperative law for some time, is omitted, as are probably other states) and inaccurate (the details of the Massachusetts law are taken from the original law of 1913, instead of 1915), hence the reader must verify each statement in the summary. Nevertheless, the exhibit shows the diversity of the legislation and an ignorance of the fundamentals of coöperation on the part of many of our lawmakers. The United States Department of Agriculture has prepared a draft of an elaborate coöperative bill, the fundamentals of which it is hoped may be enacted into law in those states having no coöperative legislation, and substituted for the imperfect laws now existing in several states.

The bulletin is timely and, in general, helpful. Were it brought down to date it would be still more helpful.

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From the Bureau of Foreign and Domestic Commerce of the United States Department of Commerce the following publications have been received:

In the Special Agents Series:

- No. 141, *The West Indies as an Export Field* (pp. 378), by Gerrard Harris.
- No. 142, *Markets for Agricultural Implements and Machinery in Chile and Peru* (pp. 48), by Frank H. von Motz.
- No. 143, *Paper, Paper Products, and Printing Machinery in Peru, Bolivia, and Ecuador* (pp. 77), by Robert S. Barrett.
- No. 144, *Markets for Construction Materials and Machinery in Venezuela* (pp. 57), by W. W. Ewing.
- No. 145, *Market for Boots and Shoes in Jamaica* (pp. 24), by Herman G. Brock.

In the Miscellaneous Series:

- No. 54, *Canned Foods: Modern Processes of Canning in the United States, General System of Grading, and Description of Products Available for Export* (pp. 79).
- No. 55, *Markets for American Hardware in Italy, Spain, and Portugal* (pp. 109), by C. W. A. Veditz.
- No. 57, *German Foreign-Trade Organization with Supplementary Statistical Material and Extracts from Official Reports on German Methods* (pp. 182), by Chauncey D. Snow. This is of exceptional interest. It contains chapters on Historical development of German export trade; Commercial education; Industrial colonization; German banks and foreign trade; German merchant shipping; Government assistance to foreign trade; Private and semipublic trade associations; and Study and cultivation of foreign trade and foreign markets. A part of the material has been taken from previous publications of the bureau.
- No. 60, *The Glass Industry: Report of the Cost of Production of Glass in the United States* (pp. 430).
- No. 61, *Commercial Organizations of the United States*, revised to July 1, 1917 (pp. 116).

The federal Bureau of the Census has published a series of bulletins relating to different branches of industry summarizing the results of the *Census of Manufactures: 1914*. Among the industries thus far covered are: Automobiles, including bodies and parts (pp. 19); Butter, cheese, and condensed milk (pp. 23); Flour-mill and gristmill products (pp. 20); Manufacture of glass (pp. 13); Glucose and starch industry (pp. 9); Manufactured ice (pp. 15); Needles, pins, and hooks and eyes (pp. 8); Oilcloth and linoleum (pp. 8); Paper and wood pulp (pp. 19); Rice cleaning and polishing (pp. 9); The soap industry (pp. 11); and The sugar industry (pp. 13).

Among the bulletins recently issued by the United States Department of Agriculture are:

No. 889, *Public Road Mileage and Revenues in the Central, Mountain, and Pacific States, 1914* (pp. 56, lxxv).

No. 548, *The Business of Ten Dairy Farms in the Bluegrass Region of Kentucky* (pp. 12).

No. 558, *Marketing Grain at Country Points* (pp. 45).

Farmers' Bulletin 809, *Marketing Live Stock in the South: Suggestions for Improvement* (pp. 16).

The Federal Trade Commission has made a *Report on the Beet Sugar Industry in the United States* (Washington, May 24, 1917, pp. 164).

The federal Bureau of the Census has published a pamphlet on *Cotton Production in the United States, Crop of 1916* (pp. 43).

The Chamber of Commerce of the United States of America is issuing a series of brief war bulletins.

The United States Department of Agriculture, in coöperation with the extension service of the Massachusetts Agricultural College, is establishing four offices for the marketing of farm produce in Massachusetts. Mr. Elliot C. Rogers has been engaged to take charge of the office in Lynn, which covers Middlesex and Essex counties; Mr. R. W. Merrick for the one in Brockton covering Plymouth, Norfolk, and Barnstable counties; Professor W. L. Machmer, of the agricultural college, for the one which will have supervision of the work in the four western counties of the state, with headquarters in either Springfield or Northampton. A fourth office will be opened in Worcester. Professor E. Farnham Damon will have general charge of this work.

The *Third Annual Report of the Department of Foods and Markets of New York, 1916* (Albany, 1917, pp. 26) describes methods that were put in operation in order to bring the farm and the consumer nearer together.

A bulletin of the Extension Division of Indiana University is *City Markets: How to Start and Operate a City Public Retail Market*, by Professor Frank T. Stockton, now of the University of South Dakota (July, 1917, pp. 16).

The Guaranty Trust Company has issued a summary of the *Espionage Act* dealing especially with regulation of exports (New York).

The National Bank of Commerce in New York has issued a pamph-

let on *Exports of Raw Cotton from the United States to the Leading European Neutrals, 1900-1917* (New York, Sept., 1917, pp. 18).

Under the combined auspices of the Attorney-General of Massachusetts, the department of agricultural economics of the Massachusetts Agricultural College, the Boston Chamber of Commerce, and the Food Administrator of the state, an investigation of the cost of distributing milk in Boston and vicinity has been made. The investigation includes a careful study of the accounts of twenty of the smaller distributors and of three or four of the so-called milk contractors. Under the same auspices a thoroughgoing study of the cost of production of milk in the six New England states has already been made, figures being secured from some 850 farms producing some 12,000,000 quarts of milk. A bulletin summarizing the results of this investigation is now in preparation by the Massachusetts Agricultural College.

A new organization which promises much for the whole milk industry is the National Milk Producers' Federation, which was organized and incorporated at Chicago in December, 1916. The purposes are an investigation of the conditions and contracts under which milk is sold by farmers and wholesalers; the dissemination of information concerning prices, markets and grades to members of the Federation and to producers; the introduction of legislation dealing with grades and standards; the organization of milk producers' associations; and, in general, the protection of the whole milk industry. The membership includes organizations of milk producers, particularly those selling whole milk. At present the Federation has among its members such organizations as the Chicago, Twin City, Milwaukee, St. Louis, Cincinnati, Michigan, and Northern Ohio milk producers' associations, the Dairymen's League of New York, The New England Milk Producers' Association, covering the six New England states, the Tri-State Milk Producers' Association, which includes New Jersey, Pennsylvania and Maryland, as well as a few smaller organizations. The Federation met in Washington, D. C., on October 10, to perfect the organization, to discuss with the Federal Food Administrator the problem of milk prices and contracts, and to take up with the Department of Justice the legal status of farmers' associations dealing with the sale of milk. Hereafter, the Federation will maintain in Washington a representative whose time will be devoted to the interests of farmers' dairy associations, especially those dealing with the marketing of whole milk.

A. E. C.

Corporations

The Bureau of Railway Economics has published a *Summary of Railway Returns for the Year Ending December 31, 1916* (Washington, Consecutive No. 114; Miscellaneous Series No. 29, 1917, pp. 23). This is the third bulletin in this series.

There have been received from the Presidents' Conference Committee (937 Commercial Trust Bldg., Philadelphia):

Corporate History of Philadelphia, Baltimore and Washington Railroad Company as of the Date of Valuation, June 30, 1915 (pp. 32), with chart showing the relation of the different companies.

Hearing before the Interstate Commerce Commission in the matter of valuation of the Atlanta, Birmingham, & Atlantic Railroad Company and other companies of the South and Southwest, (pp. 34). The hearing was held June 18, 1917.

Statement prepared by H. C. Phillips, General Secretary, of the Developments in Connection with Federal Valuation, as of September 20, 1917 (pp. 4).

Poor's Manual Company has published the *Intermediate Manual of Railroads*. Bond statements, income accounts, and balance sheets have been revised. (New York, 80 Lafayette St., \$7.50.)

Among public utility reports recently received are the following:

Fifth Annual Report of the Public Utilities Commission of Connecticut (Hartford, 1917, pp. 659). The volume is largely made up of statistical tables and does not include the decisions of the commission.

Reports of the Board of Public Utility Commissioners of New Jersey, volume IV, July 12, 1915 to December 29, 1916 (Trenton, 1917, pp. 613). This contains the decisions made by the commission during a period of a year and a half.

Financial and Miscellaneous Statistics Compiled from Annual Reports Made by Public Utilities to the Board of Public Utility Commissioners of New Jersey, for 1915 (Trenton, 1917, pp. 234).

Reports of Decisions of the Public Service Commission, Second District, New York, 1916, volume V (Albany, 1917, pp. 445).

Tenth Annual Report of the Public Service Commission of Oregon, December, 1916 (Salem, 1917, pp. 248). This contains a report on lighting, heating, and power rates of the Portland Railroad, Light, and Power Company (pp. 67-130), in which there is a discussion of the principles of reproduction cost and going cost.

Sixth Annual Report of the Public Service Commission of the State of Washington (Olympia, 1916, pp. 437). This contains the decisions.

Fifth Annual Report of the Public Utilities Commission of Rhode Island, for 1916 (Providence, 1917, pp. 135, viii). No extended decisions involving questions of general policy are included.

Seventh Annual Report of the Quebec Public Utilities Commission, for the year ending June 30, 1916 (Quebec, pp. 193).

Labor

Recent bulletins of the federal Bureau of Labor Statistics are:

No. 204, *Street Railway Employment in the United States* (Washington, April, 1917, pp. 1134). This contains chapters on Wages of car crews, Hours of labor and days worked, Associations of employers and employees, and Agreements between employers and employees. There are extended statistical tables illustrating the various points under discussion. The study is based upon returns of over 80 cities and the data were collected, for the most part, in May, 1914. In addition data were secured by correspondence with more than 300 companies in smaller cities.

No. 209, *Hygiene of the Printing Trades*, by Alice Hamilton and Charles H. Verrill (April, 1917, pp. 118). This is based upon investigations in 130 plants in 7 cities: Boston (including Cambridge), New York (including Garden City), Philadelphia, Baltimore, Washington, Chicago, and St. Louis. Thirty-four of the plants were newspaper offices. Although disease-producing conditions are to be found in many shops, the conclusion is that in general there has been a marked improvement in sanitation during recent years; and several model establishments are to be seen in these cities. A special examination of 200 printers in Boston and Chicago was made and it showed that 107 had impaired health and that 18 of these were suffering from chronic lead poisoning. The experience of the International Typographical Union shows that the health of printers improved between 1900 and 1915. The monograph contains summaries of similar investigations of the printing trades in foreign countries.

No. 213, *Labor Legislation of 1916* (Washington, June, 1917, pp. 197). The material is summarized by topics and by states.

The American Anti-Boycott Association, in its June bulletin, gives a summary of the decisions of the United States Supreme Court in the Paine Lumber Company case (pp. 3) and also prints the decision in full (135 Broadway, New York, pp. 19).

The Industrial Commission of Wisconsin issued in August, 1917, a bulletin giving *Some Statistics of Child Labor in Wisconsin* (Madison, pp. 11). The same commission has published its first report on

Apprenticeship, for the year 1916, which discusses the operation of the law of 1915 (pp. 14).

Among recent bulletins relating to better physical conditions in industries is Report No. 28 of the Department of Investigation and Statistics of the Industrial Commission of Ohio, which deals with *Rates of Wages, Hours of Labor, and Fluctuation of Employment in Ohio in 1915* (Columbus, 1917, pp. 336).

The New York State Industrial Commission has published *Proceedings of the First Industrial Safety Congress of New York State*, held in December, 1916 (Albany, 1917, pp. 236).

In the *Second Biennial Report of the Industrial Welfare Commission of Washington*, 1915-1916 (Olympia, 1917, pp. 251), one chapter is devoted to the minimum wage law with a historical review of the special experience of Washington; another, to the apprenticeship system (pp. 66-75).

The Bureau of Statistics and Information of the Industrial Commission of the State of New York has made a reprint of the *New York State Labor Law and Industrial Code with Amendments, Additions, and Annotations to July 1, 1917* (pp. 270).

The Joint Board of Sanitary Control in the Cloak, Suit and Skirt and Dress and Waist Industries, New York City, has published its *Seventh Annual Report* (31 Union Square, 1917, pp. 16).

The Department of Immigrant Aid of the Council of Jewish Women (242 East Broadway, New York) published in 1916 *A Brief Summary of Investigations and Inquiries* made between the years of 1905 and 1915 by government and private agencies into typical industries prevalent in the state of New York and affording work to large numbers of women (pp. 45, charts). This is an interesting study relating to wages, hours, seasonal fluctuations, and apprenticeship and trade training. There is a bibliography of three pages.

Money, Prices, Credit, and Banking

THE EQUATION OF EXCHANGE FOR 1916, as calculated by the usual method is:

Circ. of money (50)	+	Circ. of checks (712)	=	Value of goods bought (762)
Money \times its velocity	+	Deposits \times their veloc.	=	Trade \times scale of prices
$M \times V$	+	$M' \times V'$	=	$T \times P$
2.10×24	+	11.83×60.2	=	595×128 per cent.

That is, the money in actual circulation (i.e., outside of banks and the United States Treasury) was 2.10 billions of dollars and changed

hands about 24 times in the year, thus effecting 2.10×24 or 50 billions of exchanges; the volume of deposits subject to check was 11.83 billions and changed hands about 60.2 times in the year, thus effecting 11.83×60.2 or 712 billions of exchanges, the two together making a total of $50 + 712$ or 762 billions. This paid for a volume of trade of 595 billion units (a "unit" of trade being that amount of goods which in the base year, 1909, was worth \$1), at prices 28 per cent higher than the prices of said base year, so that 595×128 per cent is also 762.

The large diagram affords full comparison (both visual and numerical) between the above-named figures for 1916 and the corresponding figures for previous years. It will be noted that between 1915 and 1916 there was, as forecasted last year, a general expansion in all the magnitudes of the equation. This expansion, in the case of bank deposits, was more than 25 per cent. In the other magnitudes it ranged from 10 to 20 per cent.

As was the case last year, though not so markedly in 1916, a large part of the increase in the volume of trade was doubtless due to the great expansion of the trade in securities.

The smaller diagram continues that given two years ago, and gives in greater detail the same data at the six dates each year for which the comptroller's figures for national banks are available. The first three dates¹ were before the outbreak of war in Europe.

As noted two years ago, the various magnitudes of the equation of exchange varied little in the first three periods of 1914, preceding the war, but after its outbreak, they fluctuated violently. There were sudden contractions followed by gradual expansions.

The volume of trade showed a sudden fall following the outbreak of the war and a subsequent full recovery distributed through the remainder of 1914. The velocities² of circulation showed the same sudden contraction with subsequent rapid recovery.

The money in circulation showed an emergency expansion during the last half of 1914, with a restoration to normal in 1915, and a ten-

¹ The exact dates for the comptroller's data are as follows:

For 1914, Jan. 13, March 4, June 30, Sept. 12, Oct. 31, Dec. 31.

For 1915, March 4, May 1, June 23, Sept. 2, Nov. 10, Dec. 31.

For 1916, March 7, May 1, June 30, Sept. 12, Nov. 17, Dec. 27.

As indicated in the heading of the smaller diagram, all the rates are rates per year, not per month. The method of calculation is the same as that used two years ago and described in this REVIEW for June, 1915.

² As to money this is only inferential, on the assumption that its velocity followed that of deposits.

dency to expand towards the end of 1916—a tendency which has been continued in 1917,³ i.e., beyond the period covered by the diagram.

The deposits, on the other hand, executed an opposite movement, contracting soon after the war began, and expanding during 1916 (and 1917).⁴

These various changes above noted are closely associated with a third magnitude, namely, the *money in banks*, that is, the (cash) bank reserves which are not represented specifically in the diagram but which are given (in billions) in the following table:

MONEY IN BANKS

1914	National	All	1916	National	All
Jan.	1.03		Mar.	.90	
Mar.	1.02		May	.85	
June	1.02	1.67	June	.82	1.91
Sept.	.98		Sept.	.85	
Oct.	1.01		Nov.	.86	
Dec.	.73		Dec.	.88	
1915			1917		
Mar.	.78		Mar.	.89	
May	.79		May	.84	
June	.86	1.77			
Sept.	.91				
Nov.	.92				
Dec.	.88				

These figures and those in the diagram indicate that the shock of war produced a displacement of cash from banks into private pockets and tills, followed by a reaction.

The net effect of all the various changes above mentioned on the scale of prices was trifling during 1914 and the first two thirds of 1915. Since that time there has been a rapid rise to the present time.

The chief factor in this rise has been the quantity of money in circulation and in banks, and the increase in these has been chiefly due to the gold imported from abroad.

³ Although not all the data needed to establish this conclusion are as yet available it is a fair inference from the two facts (1) that the total money in the United States outside of the U. S. Treasury has increased since 1916 (the figures for the first months of 1917 being successively (in billions): 4.44; 4.50; 4.58; 4.70; 4.74; 4.73; as against a previous maximum of 4.44 in Dec. 1916), and (2) that the part of the above which consisted of the money in national banks did not decrease (being .89 in March, 1917, and .84 in May, 1917, as against an average in 1916 of .86).

⁴ Inferable from the fact that the part of these individual deposits subject to check which were in *national* banks are known to have expanded (being 6.37 from March, 1917, and 6.63 for May, 1917, as against a previous maximum of 6.35 in Nov., 1916).

The money in circulation outside of banks is the M in the diagram and acts on prices through MV . The money in banks is the basis for deposits (M') and so acts on prices through $M'V'$. In both of these, gold has been the dominant element.

Ordinarily the variations in this total money are no greater than those in velocities of circulation or in volume of trade, so that there is, ordinarily, no special or very evident correlation directly observable between the price level and money. But during the war the quantity of money has changed so much more markedly than velocities or trade that it has come to dominate the situation almost completely.

Accordingly, we find that latterly changes in the price level have followed changes in the money quantity (and especially changes in that part of this quantity which consists of gold) with very surprising closeness.

I include a diagram which shows these comparisons month by month.⁵ It shows, at the left: (1) a speculative "mark-up" in prices—such as is usually found at the outbreak of wars and which, as it soon proves out of tune with fundamental conditions, disappears: (2) the reduced circulation from the export of gold; and (3) immediately thereafter, the increased circulation from the issue of emergency currency.

After the middle of 1915 the agreement is so close that one can identify the exact corresponding points. We can even measure the lag. We find that a change in price level follows a change in total money after a lag of about two months. This became evident from the time, August, 1915, when the quantity of money first began its rapid increase. One month later prices began to shoot upward keeping almost exact pace with the quantity of money. The striking correspondence has continued up to date.

This close agreement, point by point, between the two upper curves, is shown by dotted lines and the lag, in each case, by the figures in circles, *viz.*, 1, $2\frac{1}{2}$, $2\frac{1}{2}$, 2, 2, 1, 1 and $\frac{1}{2}$ months respectively. Besides these *eight* very obvious cases of point-for-point correspondence we may count about a half dozen other less obvious ones; and besides these there is the very obvious *general* correspondence between the curves.

⁵ I have used Dun's index number inasmuch as that of the Department of Labor month by month is not available up to date. The plotting is on a "ratio chart" and therefore gives, in the relative slopes of lines, the *exact* relative percentage changes of the various magnitudes. For a full description see my "The 'ratio' chart," *Publications of the American Statistical Association*, June 1917.

Since at least as early as August, 1915, there are only two points in Dun's curve (*viz.*, February and March, 1916) which seem definitely out of tune with the other curves. Curiously enough these two discrepancies seem to be peculiar to Dun's index number. The other index numbers available (*viz.*, Bradstreet's and that of the United States Bureau of Labor Statistics) do not show these discrepancies, although each has some other discrepancies of its own.

It must be remembered, of course, that any index number is only an imperfect measure of the actual price level, so that even a much rougher agreement than we find might well be expected.

It would be strange indeed if so close a correspondence were accidental. The chances, on any reasonable method of calculation, that the point-for-point correspondences should occur by accident are much below one in a hundred.

The agreement seems, therefore, a sufficient answer to the few who are still unwilling to concede any truth in the so-called "quantity theory" of money. Professor Cassell finds a somewhat similar correspondence in Russia,⁶ and Professor J. S. Nicholson of Edinburgh writes me that he is soon to publish a paper showing that "the index numbers of the *Statist* and *Economist* follow the Treasury notes by about three months."

The war has thus supplied a decisive laboratory experiment to test the long contested theories of money.

The great outstanding result is, so far as the United States is concerned, that the war has brought gold to us and that gold-inflation lies at the bottom of the spectacular rise in prices which we have recently experienced.

In the future, now that America has entered the war, we may expect greater and more varied effects. I anticipate, that, with the increased war expenditures and the consequent war loans, there will be a great expansion of deposits and a further great rise in the price level. A more drastic tax policy, as suggested by Professor Sprague of Harvard, would go far to retard and lessen this effect.

IRVING FISHER.

Yale University.

The Federal Land Bank of Springfield, Massachusetts, has issued a leaflet on *How to Secure a Loan* (pp. 4).

⁶ "The Present Situation of the Foreign Exchanges," by Professor Gustav Cassell, *Economic Journal*, vol. XXVI, no. 103 (Sept., 1916).

State bank reports received are:

Annual Report of the Commissioner of Banking and Insurance of New Jersey, 1916 (Trenton, 1917, pp. 41).

Eleventh Biennial Report of the Bank Commissioner of Missouri (Jefferson City, 1917, pp. 490).

The Pompeian Company, Baltimore, has published a large number of useful circulars and pamphlets in advocacy of governmental control of foreign exchange.

Public Finance

FINANCIAL STATISTICS OF STATES, 1916. The second annual report under this head, issued by the United States Bureau of the Census, was published in October. Practically all of the text, which takes up approximately half of the volume of 127 pages, is exactly like that of the previous report except that the figures are different; and, similarly, nearly all of the comments which were made in the March, 1917, issue of this REVIEW about the first report are likewise applicable to the more recent publication. It will be recalled that most of these statistics are for the fiscal year of 1915 despite the title which indicates that they are for 1916.

A few tables, supplementary to the general tables, are added, thus showing some items more in detail in the latest report. The general tables are exactly the same in number and title, with the exception of a very slight change in one title. A few of the general tables are expanded slightly; for example, the last table contains nine additional columns which compare assessed valuations and rates of levy with "estimated true" values and levies. This is done for each state for each of three classes of property, real personal and "other property."

Only ten states, Maine, Massachusetts, Connecticut, New Jersey, Indiana, Wisconsin, West Virginia, Oklahoma, Colorado, and Arizona, are reported as assessing both real and personal property at 100 per cent of its true value. Two others, Kansas and Virginia, are reported as assessing personal property at true value. Nebraska's assessment of 20 per cent of true value for all classes of property is the lowest given, though several other states are as low as 25 per cent and 30 per cent. In some of these states such assessments have been made legal; in others they are made by common consent, though contrary to the statutes.

The latest report makes no comparisons with the former one. This is left for the reader who has both volumes at hand and the patience to go through the same. Perhaps such comparisons would not be

worth a great deal in view of the lapse of only a year. The writer might mention for what it is worth, however, that the average of the percentages of revenue receipts required for current expenses and interest was greater, and the part available for outlays and other purposes was less, in the so-called fiscal year of 1916 than the previous year. More states are shown to have had payments for expenses and interest in excess of revenue receipts for the later year, and, as might be expected, the average per capita indebtedness for the state governments (not including that for local subdivisions, which is much greater) is shown to have increased from \$5.90 to \$6.03 during the twelve months.

It is to be hoped that these annual reports will be continued and, furthermore, that the later ones will contain brief summaries, showing important changes and trends.

ROY G. BLAKEY.

TAXATION IN OHIO. *The Tax Laws of Ohio* (Columbus, 1917, pp. 75) relating to the assessment of real and personal property, as amended by the enactment in 1917 of the non-partisan tax law, have been issued by the tax commission in codified form with instructions for county auditors, assessors, and boards of revision. It is declared in Section 4 of the law that the legislation is of an emergency character. It was made necessary by a judgment of the supreme court in January of this year declaring unconstitutional those provisions of the Parrett-Whittemore tax law of 1915 which authorized the appointment, instead of the election, of assistant assessors and county boards of revision and the fixing of their compensation annually instead of for their entire term by the general assembly. The decision left the state without adequate means of levying and collecting taxes for 1917 and thereafter. A joint bipartisan committee of the legislature in session at the time was appointed at once to deal with the situation, and it recommended a bill which was adopted in March by both senate and house. It is the purpose of this note to indicate the purport and significance of the new legislation.

This revision of the tax laws accurately reflects the unsettled tax situation in the state. Decentralized control of the taxation of all property is again endorsed, and elective assessors are retained. The law provides that "no experts, assistant, clerk employee, or assistant assessor herein provided for shall be subject to the provisions of any civil service law or regulation." No advance is made, therefore, toward freeing the officials from the influence of political considerations in their assessment work. The long-standing difficulty of securing a

complete listing of personalty and of distributing the burden of taxes equitably between the holders of real, tangible, and intangible personal property is dealt with in one novel provision requiring the owner to make oath to his own return of all classes of personalty which under the law are still taxable at a uniform rate for their true value.

The general aim of the revision is to provide promptly the necessary assessment machinery. Accordingly existing officials are utilized, and the county is made the unit for assessing real property. The county auditor is made the chief assessing officer of real estate with enlarged supervisory powers over the elected assessors and their appointed assistants who have the same qualifications but duties differentiated from those of the elective assessors. The compensation of an assessor or an assistant is fixed in the law at \$4 per day while necessarily engaged in the performance of his duties. The powers of the office of assessor are exercised largely under the direction of the county auditor in assessing real estate, examining all returns, ascertaining omissions or improper valuations of property, correcting such lists and returning them to the auditor. That the office has lost some attractiveness is borne out by reports to the tax commission from 51 counties reporting to date (October) the expense of assessors' salaries which show that these counties have been able to save from 25 to 90 per cent of the amount heretofore expended under this head. Thus, Montgomery County, whose return of personal property valuations alone increased from \$53,036,020 in 1916 to \$66,933,690 in 1917, expended for the services of assessors in 1917 \$3,883 as compared with \$7,892 for the preceding year. It has also been observed in a larger number of instances than usual that men are not being nominated for nor seeking the office of assessor at the fall elections, presumably in part because of the lessened prestige of the office. The advocates of appointive instead of elective assessors may accordingly derive encouragement from the fact that although this year's legislation continues elective assessors as such, the narrowing of their duties under the provisions of the new law tends toward their gradual elimination from the system.

The county auditor is required to ascertain annually whether the assessed value of all the real property in his county corresponds to its true value. Twenty-five freeholders or the board of trustees or council may petition in any year for a reassessment of the real estate of any township. With the confirmation of the county board of commissioners the county auditor may make in such case any corrections, readjustment or assessment that may be ordered.

The county treasurer, the county auditor, and the president of the

board of county commissioners constitute a county board of revision. They may meet at any time during the year at the call of the secretary to examine and revise the statements and returns of personal property made to the county auditor, and to revise the assessment and listing of real estate by the county auditor for the current year. Complaints filed with the county auditor alleging unfair assessment of property must be investigated by the board, who may order a reassessment or an increase or a decrease in any valuation. The officials composing the boards of revision receive no extra compensation for their added duties, and it is doubtful whether ex-officio members designated in this way may be expected to render efficient service in the work of tax revision. Furthermore, since there is no power of removal of ex-officio members, any control of the tax commission over tax revision is indirect and ineffective. The county auditor, being made secretary of the board, is obviously of slight aid in revising his own assessment and listing of property.

The most vital and distinctive provisions of the law are those that were devised to facilitate the listing of personal property, particularly intangibles, moneys, credits, and stock and bond investments. For this purpose the scheme of voluntary listing was introduced. At the basis of the plan is the belief that the taxpayer will correctly answer direct questions, if he confronts himself with them. The tax commission is directed to prepare blanks containing questions "which will elicit a full disclosure of all property" required to be thus listed. The tax blanks are to be left in convenient places to be called for by taxpayers, or to be sent to them by mail. Property owners in this way are made responsible at the outset for going through the process of listing at their true value all items of personal property held during the year, and of subscribing upon their own initiative to an oath as to the correctness of each evaluated item, and of delivering in person or by mail the sworn returns to the county auditor. Failure to make a voluntary return before May 1 forfeits the right to an exemption of \$100 provided under the law. The county auditor may go over the returns with the local assessors of the respective taxing subdivisions and refuse to receive any incomplete statements of property. Under the direction of the county auditor the local assessor may call upon the person omitting or incorrectly listing property and upon actual view list and assess it correctly. When false returns are discovered, or if the property owner has refused to make a voluntary return or to make oath to his return, the county auditor is required by the law to list and assess all such property adding thereto 50 per cent of the assessed value.

Voluntary listing on several counts appears impracticable as a means of permanently securing a complete return of personalty for taxation. First, there is the difficulty for the person of average intelligence of recording accurate answers to a long list of printed questions; then, the effort of subscribing to an oath before an official; third, the inconvenience of delivering in person or sending by mail within a specified time the sworn return to the county auditor. Further, there is the inequity and the injustice invariably resulting from wide variations in the judgment and conscience of men when estimating the value of taxable property. Finally, experience in other states has shown that it is impossible by any plan yet devised to secure a complete return of intangible personal property to be taxed at a uniform rate with all other property which amounts usually to taking from 20 to 50 per cent of the income of this property. However, the 1917 returns of personal property to the tax commission from 51 counties are favorable to the new law in this respect. Thus, these counties under the Parrett-Whitemore law in 1916 returned personalty to the commission to the amount of \$751,539,318, while under the new scheme of listing the personalty valuation in 1917 amounts to \$879,587,403, showing a gain of \$128,048,085. Only one of the counties shows a loss in personalty valuation as compared with the preceding year, the amount being \$68,454. The same counties in 1916 showed a gain in personalty returns over 1915 of \$31,789,457. These figures indicate apparently that a considerable part of the increased returns of this year must be due not merely to normal growth nor to a higher level of prices nor to any greater prosperity in 1917 than prevailed in 1916, but to the plan of voluntary listing. It will be of interest to observe the complete record of the returns for this year and succeeding years with the voluntary plan in operation.

F. E. WOLFE.

Ohio Wesleyan University.

The *Minority Report* of Senator La Follette of the Committee on Finance relating to revenues to defray war expenses has been issued as Senate Report 103, Part 2 (65 Cong., 1 Sess., pp. 99). It contains tables showing the application of the income and war-profit taxes to the net income of a large number of corporations.

Bulletin No. 3 of the Rhode Island Tax Officials' Association is especially devoted to the *Valuation of Automobiles* (Providence, Sept. 1, 1917, pp. 21).

The Irving National Bank has issued a pamphlet entitled *Practical Questions and Answers* on the federal tax law affecting individuals,

partnerships, and corporations, prepared and copyrighted by Breed, Abbott, and Morgan (October, 1917, pp. 73).

Summaries or reprints of the recent federal war revenue act of October 3, 1917, have been prepared by: A. B. Leach & Co., 62 Cedar St., New York (pp. 38); Guaranty Trust Company, 140 Broadway, New York (pp. 132); National Shawmut Bank, 40 Water St., Boston (pp. 16); and The American Exchange National Bank, New York City (pp. 78).

Insurance

PROCEEDINGS OF THE CONFERENCE ON SOCIAL INSURANCE, 1916. The plan of holding the meeting of the International Congress on Social Insurance in Washington in 1914 or 1915 had to be given up because of the war. In its place the International Association of Industrial Accident Boards and Commissions, under the inspiration of commissioner Royal Meeker of the United States Bureau of Labor Statistics, proposed an American Conference on Social Insurance at Washington. The date was finally arranged for December 5 to 9, 1916, and the volume containing the text of the papers presented and the stenographic record of the discussions from the floor is now at hand in the form of a Bulletin of the United States Bureau of Labor Statistics, Whole Number 212 (*Proceedings of the Conference on Social Insurance*, 1917, pp. 935). The conference covered the field of workmen's compensation, health insurance, invalidity and old-age insurance, maternity benefits and mothers' pensions, and, finally, unemployment, and savings bank insurance.

The papers and discussions on workmen's compensation are characterized by a general acceptance of the principle of compensation; not one speaker refers to the possibility of a return to the old liability system. All of the papers are devoted to questions of administration, forms of policy, methods of awards, charges, medical service, needed changes in the laws, etc. Perhaps the most energetic debate on compensation centered on the advantages of state insurance funds as competitors of private companies compared with the advantages of giving the state fund the monopoly of compensation insurance. The account of the difficulties experienced by one state fund in very active competition with private companies was, to say the least, vivid and illuminating. The important and hitherto somewhat neglected subject of medical service, medical and hospital fees under workmen's compensation, is discussed by a number of officials of compensation boards. Dr. F. D. Donoghue, of the Massachusetts board, emphasized

strongly the need of development in this aspect of American laws. The discussion of the question of physical examination of employees brought out the strong opposition of the trade-union representatives to this plan of selecting the employees of an establishment; a good case in favor of the plan was made by a number of physicians in charge of such work. The discussions on workmen's compensation were concluded by a paper of Professor W. C. Fisher on the defects and the needed changes in American compensation laws.

Recently the question of the reëducation of the worker permanently disabled by accident has become prominent, and it is a matter of regret that only one paper of the proceedings was devoted to this topic; a number of constructive suggestions by the author however, make the paper of special value.

The topic of health (sickness) insurance was introduced by papers on group insurance, existing agencies in the United States, trade-union insurance, establishment funds of the large corporations, mutual benefit funds, the University of California system of students' health insurance, and joint-stock company insurance. With this introduction, a debate showing wide divergence of opinion began. Dr. J. B. Andrews, of the American Association for Labor Legislation, outlined the general features of the bill advocated by that organization. A representative of the American Federation of Labor and a representative of the National Association of Manufacturers followed by stating the grounds of their opposition to the proposal. A comprehensive study of the existing information on the needs of women wage-earners, by Miss Mary Van Kleeck, formed one of the outstanding contributions of the conference. The remarks of Mr. F. L. Hoffman in opposition to the proposed health insurance bill covered fully the objections to the plan. The discussion on the plan amply justified the calling of the conference in the presentation of the different views of the employers, wage-earners, physicians, and students of the question.

The special value of the publication, aside from the vast amount of authoritative information it contains, is the picture it gives of the state of opinion on social insurance at the present time. The careful editorial work of the Bureau of Labor Statistics is evident throughout the volume.

HENRY J. HARRIS.

The federal Bureau of Labor Statistics in Bulletin No. 210 presents the *Proceedings of the Third Annual Meeting of the International Association of Industrial Accident Boards and Commissions*, held at Columbus, Ohio, April 25-28, 1916 (Washington, May, 1917, pp. 254).

The Industrial Commission of New York has made a reprint of the

Workmen's Compensation Law of that state with amendments to July 1, 1917 (Albany, pp. 79).

The State Department of Labor of Nebraska has made a report upon the operation of the *Workmen's Compensation Law* for 1915 (pp. 164).

The *Report of the State Compensation Commissioner of West Virginia* reviews the administration of the workmen's compensation law to June 30, 1916 (Charleston, pp. 137).

The Insurance Society of New York has printed the following addresses: *Estimates on Building Values and Building Losses*, by William J. Moore (pp. 14); *Concealment, Misrepresentation, Fraud or False Swearing*, by Frank Sowers (pp. 27); and *Waiver and Estoppel*, by Waldemar J. Nichols (pp. 35).

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Theory

(Abstracts by A. N. Young)

BONAFONS, A. *Le mouvement sociologique américain*. Rev. Intern. Soc., May-June, 1917. Pp. 6.

A sympathetic summary of the development of social science in the United States, a movement which in the writer's opinion shows much promise.

CARLI, F. *Le leggi della popolazione ed il problema della pace*. Riv. Ital. di Soc., Jan.-Feb., 1917. Pp. 43.

Historical sociology reveals certain laws of the growth and survival of states. It is incumbent upon statesmen to understand these laws, of which usually (so in part in Germany) they have been ignorant.

CAUBOUÉ, P. *L'économie politique libérale et la guerre*. Rev. Econ. Pol., Mar.-Apr., 1917. Pp. 16.

Considerations of nationalism in economic policy will become more prominent after the war.

CLARK, J. M. *The basis of war-time collectivism*. Am. Econ. Rev., Dec., 1917. Pp. 19.

DEWING, A. S. *The law of balanced return*. Am. Econ. Rev., Dec., 1917. Pp. 17.

MCGOUN, A. F. *The nature of interest and the causes of its fluctuations*. Quart. Journ. Econ., Aug., 1917. Pp. 25.

"The rate of interest tends to vary directly with the aggregate consumption of society, and with the amount of leisure which people allow themselves, and inversely with the general efficiency of labor."

SENSINI, G. *La sociologia generale di Vilfredo Pareto*. Riv. Ital. di Soc., March-June, 1917. Pp. 57.

SOLARI, G. *Mario Pagano e la politica annonaria*. Rif. Soc., July-Sept., 1917. Pp. 31.

The important writings of Pagano have been ignored by most historians of theory.

TAUSSIG, F. W. *Kleene's "Profit and Wages"*. Quart. Journ. Econ., Aug., 1917. Pp. 5.

A favorable review.

USHER, A. P. *The content of the value concept*. Quart. Journ. Econ., Aug., 1917. Pp. 7.

The most significant meaning of value is what a thing is "really worth." But the value concept is too rich to be limited to any single precise meaning.

Economic History, United States

(Abstracts by E. L. Bogart)

ASH, T. *Carolina; or a description of that country.* Mag. of Hist., Extra, No. 59, 1917. Pp. 23.

A reprint of a rare tract first published in 1682, giving a very florid account of the Carolinas.

BAENSCH, E. *Michael Hillegas—the first treasurer of the United States.* Trust Companies, Sept., 1917. Pp. 2.

Hillegas held office from 1775 to 1789.

BARNARD, B. W. *The use of private tokens for money in the United States.* Quart. Journ. Econ., Aug., 1917. Pp. 35.

Covers the colonial period as well as that since.

BOGART, E. L. *Historical novels in American history.* Hist. Teacher's Mag., Sept., 1917. Pp. 5.

A geographical and chronological annotated list of the best fiction illustrating American history.

BOGART, E. L. *Movement of the population of Illinois, 1879-1910.* Journ. Ill. State Hist. Soc., July, 1917. Pp. 20.

Describes the growth, distribution, and shifting of the population.

CHRISTIAN, A. K. *The tariff history of the Republic of Texas.* S. W. Hist. Quart., July, 1917. Pp. 35.

Second instalment, covering the period 1841-1845.

COX, O. E. *The socialist party in Indiana.* Indiana Mag. of Hist., June, 1916. Pp. 36.

Describes the organization and work of the party and the contributions of the state to the national movement.

ESAREY, L. *The pioneer aristocracy.* Indiana Mag. of Hist., Sept., 1917. Pp. 18.

The effects of the pioneer period in producing skilful, capable, and well developed types of men.

FLIPPIN, P. V. *The Dutch element in early Kentucky.* Miss. Valley Hist. Rev., Apr. (extra number), 1917. Pp. 16.

Covers the twenty years from 1771 to 1791.

PAXSON, F. L. *The rise of sport.* Miss. Valley Hist. Rev., Sept., 1917. Pp. 26.

An interesting account of organized sport in the United States, showing its comparatively recent development. In some aspects it must be regarded as an economic phenomenon.

PEIRCE, P. S. *American trade-promoting activities.* S. Atlantic Quart., Apr., 1917.

ROOT, W. T. *The Lords of Trade and Plantations, 1675-1696.* Am. Hist. Rev., Oct., 1917. Pp. 22.

Other studies on this subject "have left out of account, except in an incidental way, the history of the full score of years fixed by this paper."

SCHOCKEL, B. H. *Settlement and development of the lead and zinc mining region with special emphasis upon Jo Daviess County, Illinois.* Miss. Valley Hist. Rev., Sept., 1917. Pp. 24.

Between 1830 and 1860 this was an important district in the mining region of the upper Mississippi Valley, but has since greatly declined.

SHEPARD, C. L. *The Connecticut Land Company and accompanying papers.* Ann. Rept. W. Reserve Hist. Soc., 1916. Pp. 174.

Covers the claims to the Western Reserve, the land in Ohio claimed by Connecticut, from 1786 to 1800.

SIBBALD, G. *Notes and observations on the pine lands of Georgia.* Mag. of Hist., Extra no. 57, 1917. Pp. 66.

A reprint of a rare pamphlet, first published in 1801 for the purpose of encouraging migration to that state.

SIMONSON, H. P. *History of the Rock Island post office.* Journ. Ill. State Hist. Soc., Oct., 1916. Pp. 2.

SPERLIN, O. B. *Washington forts of the fur trade régime.* Wash. Hist. Quart., Apr., 1917. Pp. 12.

Describes the early Spanish and British settlements and United States forts in Washington between 1792 and 1846.

STEPHENS, F. F. *Missouri and the Santa Fé trade.* Missouri Hist. Rev., April, 1917.

THOMPSON, W. M. *When Washington toured New England?* Mag. of Hist., July, 1917. Pp. 9.

Sixth instalment.

Economic History, Foreign

(Abstracts by Clive Day)

BELLET, D. *Le développement économique et la richesse de la Roumanie.* Journ. des Econ., July, 1917. Pp. 17.

CATANI, R. and JANNACONE, P. *La grande industria siderurgica in Italia.* Rif. Soc., June, 1917. Pp. 29.

Steel production in Italy is twice what it was before the war. Few technical improvements have been made. If Italy is to continue to produce steel on a large scale, she must, while contriving to utilize her water power, make technical betterments and maintain low costs.

COHN, E. *Ökonomisk oversigter.* Nat. ök. Tids., May-June, 1917. Pp. 60.

A statistical survey of economic conditions in Denmark, October, 1916, to February, 1917.

DEWAVRIN, M. *La guerre européenne et le mouvement économique au Japon.* Rev. Sci. Pol., Apr., 1917. Pp. 26.

EDGEWORTH, F. Y. *Some German economic writings about the war.* Econ. Journ., June, 1917. Pp. 12.

A review of ten books or articles, by Brentano, Mombert, Jastrow, Voigt and others.

EINAUDI, L. *Trattato di pace e trattati di commercio*. Rif. Soc., May, 1917.

At peace Italy should be free to make favorable agreements with her enemies.

FERROGLIO, G. *Il problema granario a Roma nell'epoca imperiale*. Rif. Soc., May, 1917. Pp. 12.

GAY, J. *Anglo-Russian economic relations*. Econ. Journ., June, 1917. Pp. 24.

A substantial analysis and criticism of commercial relations, and comparison with German-Russian relations.

H. B. *La situation financière et économique de l'Uruguay*. Journ. des Econ., June 15, 1917. Pp. 5.

LUZZATTI, G. *Rivelazioni sociali della guerra*. Riv. Ital. di Soc., Jan.-Feb., 1917. Pp. 8.

Reflections upon the profound changes in economic thinking which are likely to result from the war.

MATHOREZ, J. *Les éléments de population orientale en France*. Rev. Etudes Hist., Apr., 1917. Pp. 28.

Saracens, Moors, and Moriscoes, from the fourteenth to the eighteenth century.

MIROT, L. *La vie urbaine de Douai au moyen-âge*. Rev. Etudes Hist., Jan., 1917. Pp. 14.

Resumé of Espinas' large work on the subject.

OLDHAM, C. H. *Industrial Ireland under free trade*. Econ. Journ., June, 1917. Pp. 15.

Commercial policy and its results, from 1779 (equal treatment), and 1824 (free trade), to the present.

PASVOLSKY, L. *The economic problems of New Russia*. Russian Rev., July, 1917. Pp. 7.

An interesting discussion of general questions.

SCHUYLER, R. L. *Imperial preference and Sir Robert Peel*. Pol. Sci. Quart., Sept., 1917. Pp. 20.

Study of the English system of preference in the first half of the nineteenth century.

SCOTT, W. R. *Mercantile shipping in the Napoleonic wars: with some statistics of mercantile shipping losses*. Scottish Hist. Rev., Apr., 1917. Pp. 3.

Average losses of British tonnage were about 4 per cent a year; new construction made good the losses and left a small surplus.

THORSTEINSON, E. *The Doukhobors in Canada*. Miss. Valley Hist. Rev., June, 1917. Pp. 45.

VAN ANROOY, J. *De "Oude Gewoonten" (met betrekking tot de vererving van huis en hof) bij onze Twentsche boeren*. De Economist, May, June, 1917. Pp. 23, 27.

Historical and critical study of local land law and custom in the Netherlands.

Commerce

(Abstracts by H. R. Tosdal)

CHANCELLOR, W. E. *Is price regulation doomed to failure?* *Annalist*, Sept. 8, 1917. P. 1.

Bases opinion that price regulation by the government is doomed to failure upon general economic principles and historical precedents.

CORMIE, J. A. *The Hudson Bay route.* *Geog. Rev.*, July, 1917.

Descriptive sketch of cheaper route to Europe via the railroad to Hudson Bay now under construction. Its probable stimulating effect upon development of Western Canada.

CRESSY, E. *The present shortage of metals and the post-war outlook.* *Finan. Rev. Rev.*, Sept., 1917.

Concludes after examination of various factors that iron and steel will bring remunerative prices after war, that copper will rise, while zinc and aluminum will probably be cheaper.

JEFFERSON, M. *Our trade in the Great War.* *Geog. Rev.*, June, 1917.

Analysis of export and import statistics 1911 to 1916, showing great increase of trade with Allies and with neutrals near Germany as well as practical disappearance of trade with Central Powers.

JONES, E. *Report on anthracite and bituminous coal.* *Am. Econ. Rev.*, Dec., 1917. Pp. 6.

GOEMAN, W. P. *The Federal Trade Commission's report on coöperation in American export trade.* *Am. Econ. Rev.*, Dec., 1917. Pp. 4.

MANTOUX, P. *Trade with France before and after the war.* *Journ. Royal Stat. Soc.*, May, 1917.

Excellent statistical study of trade between England and France and between English and French empires bringing out supplementary character of trade before war. Advocates mutually preferential commercial policy for period after the war.

DE MÉRIEL, P. *Un coup d'oeil sur le commerce extérieur de l'Espagne.* *Journ. des Econ.*, Aug., 1917. Pp. 4.

Critical examination of statistics of Spain's foreign trade, 1900-1915.

NAKASHOJI, R. *Trade between Japan and the United States.* *Econ. Wld.*, Sept. 15, 1917. Pp. 2.

Brief statistical survey of the export industries of Japan and her trade with the United States by the Minister of Agriculture and Commerce.

PAWLOWSKI, A. *La houille blanche pendant la guerre et son avenir en France.* *Journ. des Econ.*, Aug., 1917. Pp. 12.

Description of water power resources of France and their rapid development during the war. Expresses very optimistic opinion as to future of water power utilization and its effects upon French industrial progress.

PAYEN, E. *La laine pendant la guerre.* *L'Econ. Franç.*, Aug. 25, 1917. Pp. 2.

Demonstrates statistically the decrease of supply and the increase

of demand for wool which have resulted in the present high level of wool prices.

PAYEN, E. *Le nickel: son production et ses prix*. L'Econ. Franç., Aug. 11, 1917. Pp. 2.

Study of the production of nickel and nickel prices with special reference to the situation brought about by the war.

SALIER, E. *Price-making and competition*. Journ. Account., Sept., 1917. Pp. 6.

Argument for employing sales rather than costs as basis upon which to figure the various percentages of expense, profit, etc.

WELD, L. D. H. *Marketing agencies between manufacturer and consumer*. Quart. Journ. Econ., Aug., 1917. Pp. 29.

Excellent description of the character and functions of intermediaries between manufacturer and jobber—manufacturers' agents, brokers, and commission men—with special reference to the hardware, textile, and grocery trade.

WILLIAMS, W. A. *Our future petroleum industry*. Doherty News, Sept., 1917. Pp. 4.

Concludes that present sources of petroleum will shortly prove inadequate. States that most important future source of supply is in oil shales of Colorado and elsewhere.

British war-time manufacturing. Bull. Nat. Assoc. Wool Mfrs., July, 1917.

Brief reprint of recent war regulations upon English wool manufacture for the purpose of conserving wool supplies so as to meet war needs and keep mills in operation.

New price maintenance developments. Pub. Wkly., Sept. 29, 1917. Pp. 3.

New Jersey court decides under recent Unfair Trade Practices law against department store which cut prices upon fixed price article.

Report of investigation into cold storage in Canada, under the order-in-council of November, 1916. Labour Gaz. (Ottawa), Aug., 1917. Pp. 10.

Report states that upon the whole the business of the cold storage companies has been fairly conducted and that no illegal combination or excessive accumulation have been revealed by the investigation.

Notre expansion commerciale à l'extérieur après la guerre et les banques d'exportation. L'Econ. Franç., Aug. 18, 1917. Pp. 2.

Urges the establishment of banking facilities in the Orient and in South America by French commercial interests for the purpose of developing French export trade after the war.

Situation de l'industrie du pétrole. Le Monde Economique, Aug. 4, 1917. Pp. 2.

Statistical study of oil situation showing great increase of American production, decline of Russian output, and oil fields in hands of Central Powers.

Public Utilities

(Abstracts by Ralph E. Heilman)

BRADLEE, H. G. *The war's effect on public utilities*. Stone & Webster Journ., June, 1917.

Utilities must find ways to provide for increase in business without making any material increase in plant. Employment of women is desirable, the increase of one-man operation of cars should be encouraged, and an effort should be made to decrease the peak demand and to increase the load factor.

CLAFLIN, G. E. *The public utility holding company*. Stone & Webster Journ., June, 1917.

The holding company in the utility field is advantageous because it offers to the investor safety of principal, regularity of return, marked ability in management, and the possibility of enhancement in the market value of securities.

CONWAY, T. *Effect of six-cent fares upon the volume of traffic*. Elec. Ry. Journ., Aug. 25, 1917.

Six-cent fares do not always solve the financial problem, on account of the reduction in the number of passengers carried. The experience of railways changing from a five to a six-cent fare shows that the net increase in revenue approximates only 10 per cent.

FREEMAN, W. W. *Relation of public utilities to the public*. W. Soc. Engrs. Journ., Mar., 1917.

The conditions which should be guaranteed to public utilities, in order that proper relations with the public may be established and maintained.

LEE, I. L. *How the costs of rendering service are steadily going up*. Elec. Ry. Journ., June 23, 1917.

Discussion of information secured by a questionnaire addressed to a large number of electric railway companies, regarding costs. The reports show marked increase during the past five years in the cost of materials, labor, fuel, taxes, and the special expenses due to regulation.

LEE, I. L. *How the costs of operation are steadily mounting*. Elec. Ry. Journ., June 30, 1917.

A continuation. Contains extracts of reports of electric lines in different parts of the country, showing that the upward tendency in costs of operation is widespread.

MELBY, R. C. *Laws and Supreme Court decisions affecting utility companies*. Elec. Rev. & W. Elec., May 5, 1917.

A statement of some of the more important state laws and court decisions.

RAYMOND, W. G. *What is a "fair return" for public utilities*. Ry. Age Gaz., Aug. 24, 1917.

A "fair return" means any return the corporation can earn by honorable methods, when operating freely without rate regulation, so long as it does not exceed on the reasonable investment, the rate of return expected by the man or corporation of average success in other business of equal risk and magnitude.

WOOD, F. J. *New England toll bridges*. Stone & Webster Journ., Sept., 1917.

Present status and rapid disappearance of the toll bridges of New England.

Experts testify to increased costs. Elec. Ry. Journ., Aug. 18, 1917.

Evidence presented by Committee on Ways and Means, to obtain additional revenue, representing the New York State Electric Railway Association. Shows the advances in the costs of equipment and labor.

Record of fare increases granted by commissions. Elec. Ry. Journ., July 7, 1917.

Statement regarding fare increases granted since 1914. Sixty-seven companies, representing twenty-one states and the Dominion of Canada, have obtained governmental permission to advance their fares in this period, with Massachusetts leading.

Why present fare regulation system should be changed. Elec. Ry. Journ., Sept., 1917.

Argument of M. C. Brush, president of the Boston Elevated, that companies be granted limited powers to initiate new tariffs, subject to corrective restriction by a state commission.

Railways and Transportation

(Abstracts by Julius H. Parmelee)

AISHTON, R. H. *How the railways are helping win the war.* Ry. Age Gaz., Sept. 28, 1917. Pp. 4.

ALLIX, G. *Les chemins de fer italiens en 1915-1916.* Journ. des. Trans., Aug. 25, 1917. Pp. 3.

BAKER, H. D. *The proposed connection of the Russian and Indian railway systems.* Geog. Rev., Aug., 1917. Pp. 11, maps.

BUSH, I. T. *A union freight terminal.* Commerce, July, 1917. Pp. 8, illus.

Description of Bush terminal properties on Long Island.

DOW, M. A. *The progress of accident prevention on railroads and in industries in the United States.* Econ. Wld., Sept. 22, 1917. Pp. 2.

DRUMMOND, A. T. *How far is public ownership wise?* Queen's Quart., July-Aug.-Sept., 1917. Pp. 10.

Deals with Canadian situation, and opposes nationalization.

DUFOUR, F. O. *Federal valuation of railroads.* Stone & Webster Journ., Aug., 1917. Pp. 12.

Description of methods followed by Interstate Commerce Commission.

DUNN, S. O. *American railways and the war.* Pro. St. Louis Ry. Club, Aug. 15, 1917. Pp. 13.

DUNN, S. O. *What the war means to the railways.* Collier's Wkly., July 21, 1917. Pp. 2.

EKIN, J. J. *Work of the accounting department.* Pro. Cincinnati Ry. Club, Sept., 1916. Pp. 26.

With illustrative charts.

FISH, C. R. *The northern railroads, April, 1861.* Am. Hist. Rev., July, 1917. Pp. 16.

GOOD, E. T. *British railway problems: financial, economic and political.* Finan. Rev. Rev. (London), June, 1917. Pp. 10.

HALL, R. O. *How to get the best from China's railways.* Far Eastern Rev., July, 1917. Pp. 3.

Work done by the Chinese accounting commission.

HARRISON, F. *The railroads' war problem.* Scribner's Mag., Sept., 1917. Pp. 7. Description of Railroads' War Board and its work.

HULL, W. H. *Federal partnership in railroads.* Annalist, July 9, 1917.

HUNGERFORD, E. *Drafting the box-car.* Nation's Business, Sept., 1917. Pp. 5. A phase of war efficiency.

JOHNSON, E. R. *The railroads and national defense.* National Service, Aug., Sept., 1917. Pp. 4, 6.

MALLET, P. *Les tarifs des chemins de fer français. Nécessité de les augmenter.* Le Genie Civil, Mar. 24, 1917. Pp. 4.

Revenue needs of the French railways show the necessity for increased rates.

NELSON, J. P. *Federal valuation of carriers under act of March 1, 1913.* Kentucky Law Journ., Mar., 1917. Pp. 16.

NOUVION, G. DE. *Les comptes des chemins de fer de l'état pour 1915.* Journ. des Econ., Aug. 15, 1917. Pp. 11.

Shows the old state system and the Western Railway separately.

POTTER, E. C., JR. *Freight handling in the port of New York.* Commerce, May, June, July, Aug., Sept., 1917. Pp. 5, 6, 7, 6, 7.

Profusely illustrated.

POWELL, T. R. *The Supreme Court and the Adamson law.* Univ. of Penn. Law Rev., May, 1917. Pp. 25.

RAMSDELL, C. W. *The Confederate government and the railroads.* Am. Hist. Rev., July, 1917. Pp. 17.

RAYMOND, W. G. *What is a "fair return" for public utilities?* Ry. Age Gaz., Aug. 24, 1917. Pp. 4.

Investors should be allowed as much as men of average success earn in other lines.

REA, S. *The pressing need of prompt coöperation.* Ry. Age Gaz., Oct. 19, 1917. Pp. 4.

Appeal to state railway commissions to abolish useless regulations and work.

REITELL, C. *The intercorporate relations of the New York Central Railroad.* Utilities Mag., Sept., 1917. Pp. 7, chart.

ROBBINS, E. C. *The trainmen's eight-hour day.* II. Pol. Sci. Quart., Sept., 1917. Pp. 17.

First of this series was noted in the March REVIEW.

STERLING, L. *One throttle for a thousand trains.* Nations' Business, Sept., 1917. Pp. 3.

The work of the Railroads' War Board.

THELEN, M. *Federal incorporation of railroads.* Cal. Law Rev., May, 1917. Pp. 19.

UPMANN, L. V. *Virginian Railway.* Invest. Wkly., Aug. 11, 1917. Pp. 3, map.

WHITE, G. C. and POWELL, T. F. *Possibilities of market-train service.* Ry. Age Gaz., Aug. 24, 1917. Pp. 3.

Abstract of an Agricultural Department bulletin (Yearbook separate 701, 1917).

WOODS, H. C. *The Baghdad railway in the war.* Fortn. Rev., Aug., 1917. Pp. 12.

British railways. Statist, June 30, 1917. Pp. 2.

Net earnings of British railways have virtually been kept at the level of 1913.

The future of Canadian railways. Ry. Gaz. (London), Sept. 14, 21, 28, 1917. Pp. 2, 2, 2.

Review of special Canadian Railway Commission's report.

Increasing the tonnage of freight trains. Ry. Age Gaz., July 13, 1917. Pp. 6.

Proposals of six students of the problem.

Les relèvements de tarifs. Journ. des Trans., July 28, 1917. Pp. 2.

Increased railway rates in Germany, Bulgaria, Italy, Norway, Holland, and Switzerland.

Accounting

(Abstracts by Martin J. Shugrue)

BREWER, A. F. *Overhead charges and appraisals.* Indus. Management, Sept., 1917. Pp. 5.

A clear exposition of modern methods of apportioning various items for use in public utility appraisals.

CARPENTER, C. A. *Cost methods of jobbing shops.* Indus. Management, Sept., 1917. Pp. 7.

Points out the principles of manufacturing that apply to jobbing work and then shows how material, labor, and expense may be recorded, checked, and distributed to the proper accounts.

COLLVER, C. *Figuring the book value of a stock.* Invest. Wkly., Oct. 6, 1917. Pp. 2½.

Why and how investors should seek out this factor in determining the prospective value of stocks. A specimen balance sheet analyzed.

DOWNING, H. E. *Printing costs.* Pace Student, Aug., 1917. Pp. 3.

Describes the system agreed upon by the Printers' Cost Committee of the United Typothetae and Franklin Clubs of America.

DUFOUR, F. O. *The federal valuation of railroads.* Stone & Webster Journ., Aug., 1917. Pp. 12.

Explains in detail the manner in which the valuation is being conducted and the principal problems that have arisen in connection with it.

ELDRIDGE, M. O. *Serial bonds for road building save money; tables and diagrams show that sinking-fund and annuity methods cost taxpayers many millions.* Engg. News-Record, Aug. 30, 1917. Pp. 4.

ELWELL, F. H. *The problem of standardizing university courses in accounting.* Pro. First Annual Meeting Assoc. Am. Univ. Instructors in Accounting, May, 1917. Pp. 10.

Problems requiring attention: (1) What is meant by accounting? (2) The purpose, content, and method of teaching the courses. (3) The instructors. (4) The adjustments of credits earned in different institutions. Discussion.

FREEMAN, B. N. *The mysteries of "surplus."* Doherty News, Oct., 1917. Pp. 3.

A much misunderstood term in corporation accounting explained for the benefit of laymen.

FREEMAN, H. C. *Accounting for receiverships.* Journ. Account., Oct., 1917. Pp. 22.

The breadth and scope of receivership practice from the legal point of view and the great variety of conditions with which the accountant may be confronted in entering upon an engagement in a receivership case.

HUNTER, J. *Accounting systems for retail merchants.* Journ. Account., Aug., 1917. Pp. 4.

KRIBBEN, B. D. *Contact of commercial law and accounting.* Journ. Account., Oct., 1917. Pp. 6.

Branches of law which are a necessary part of the education of an accountant.

McKAY, C. W. *Relation of appraisal to industrial management.* Indus. Management, Oct., 1917. Pp. 7.

The nine functions of an engineering valuation and the four general methods of industrial appraisal.

MAURER, W. R. *Rolling stock and machinery valuation.* Ry. Age Gaz., July 27, 1917. Pp. 4.

Suggestions for the benefit of the mechanical department forces in handling the federal valuation work.

PARKER, G. H. *The use of the waybill in the collection of railroad revenues.* Commerce, Sept., 1917. Pp. 7.

The medium by which the agent at point of origin sets the freight in motion and which forms the basis of accounting.

RUSSELL, H. A. *Monthly and yearly inventories.* Indus. Management, Sept., 1917. Pp. 9.

Explains in detail the methods used by a large agricultural implement factory showing how the inventory is planned for what preliminary work is done and the principal blanks and forms used.

THOMAS, E. S. *Determination of income rate on unusual serial bonds.* Journ. Account., Aug., 1917. Pp. 6.

Where serial bonds are purchased at different times at flat prices and payments in redemption are irregular.

TINSLEY, A. L. *Classification of income and profit and loss accounts.* Journ. Account., Aug., 1917. Pp. 6.

Points out ways of improving the main divisions or groupings of the income and profit and loss accounts.

TRELEVEN, J. E. *The present status of instruction in accounting in colleges and universities.* Pro. First Annual Meeting Assoc. Am. Univ. Instructors in Accounting, May, 1917. Pp. 13.

A statistical study of the nature and extent of the instruction in accounting in colleges and universities.

WADE, E. B. *Accounting features of public utility valuations.* Journ. Account., Sept., 1917. Pp. 8.

Outlines the various phases of a somewhat specialized line of work in which accountants take important parts in collaboration with engineers.

System of auditing on the Boston & Maine. Ry. Age Gaz., Sept. 21, 1917. Pp. 6.

As the result of an investigation extending over a number of years a simplified system of freight accounting on the daily report plan has been inaugurated. Operation of system explained by use of sample forms.

Investments

(Abstracts by Arthur S. Dewing)

COLLVER, C. *Determining book value.* Invest. Wkly., Oct. 6, 1917.

Important as index to investment value.

GIBSON, T. *Advance coming in rails.* Invest. Wkly., Sept. 1, 1917.

Suggests probability.

HICKERNELL, W. F. *American panic. 1783-1822.* Invest. Wkly., Aug. 4, 1917.

Superficial but interesting; a series of instalments.

HOLT, B. W. *Bull markets in war times.* Invest. Wkly., Sept. 8, 1917.

Suggests high probability of stocks remaining at present levels owing to demands for capital. Does not analyze economic conditions.

MOORHEAD, C. H. *The silver stocks.* Invest. Wkly., Sept. 8, 1917.

Interesting attempt to correlate stock value with rise of silver bullion.

SCHWEDTMAN. *Lending our financial machinery to Latin America.* Am. Pol. Sci. Rev., May, 1917.

Points out one phase of our position as the world's creditor nation.

THOMAS, E. S. *Determination of income rates on serial bonds unusual.* Journ. Account., Aug., 1917.

A detailed study.

WARFIELD, S. D. *Railroad security owners*. Invest. Wkly., Oct. 6, 1917.

Greater organization among railroads an element of increased strength.

Chile copper. Invest. Wkly., Sept. 22, 1917.

Points to vastness of Chile deposits. Analysis of investment value.

The depreciation of British home investments. Econ. Journ., June, 1917.

A very interesting statistical study. Shows that the depreciation of prime English home investments—British railway debentures, for illustration, noticeable since 1912—has been accelerated by war. Depreciation of English home greater than of similar foreign securities. Suggests fundamental cause to be less productivity of English workmen.

Incidents and experiences in the flotation of the Liberty Loan, told by bankers. Journ. Am. Bankers Assoc., Aug., 1917.

Valuable set of excerpts from local rural bankers letters. Missionary work in rural communities necessary. Handicap because farming classes are not bond-buyers by habit. Wealthy farming classes of Middle West, especially sections with German blood, not responsive.

Corporations and Trusts

(Abstracts by Arthur S. Dewing)

ASHLEY, W. J. *The German steel syndicate and the steel industry of Great Britain*. Econ. Wld., June 23, 1917.

Digest of a short article. Although strictly analytical implies that, even with loss of individual initiative, it is advisable for British iron and steel makers to combine.

DUNCAN, C. S. *Legalizing combinations for export trade*. Journ. Pol. Econ., Apr., 1917.

A careful summary of conditions leading up to agitation for Webb bill. Correctly points out fundamental contradiction between this measure and so-called anti-trust legislation. Article both critical and constructive.

FREEMAN, H. C. *Receivership accounting*. Journ. Account., Oct., 1917.

A careful outline of a very complicated phase of corporation finance. Many legal considerations are not given their full importance.

VICKERY, J. H. *The government and industry as illustrated by the German industrial syndicates*. Econ. Wld., July 7, 1917.

An English writer favorable to the cartel. This is one reason for expansion of Germany steel industry in face of inherent difficulties. Implies advocacy of policy by England after war.

Two views of the German cartel. Iron & Steel Trades Rev., Mar. 16, 1917.

A defense of the cartel system.

L'activité des industries contonnières du Japon. L'Econ. Moderne, Apr. 24, 1917.

A very enlightening summary of a textile "association" in the Far

East. Extremely interesting to students of international combinations. Between the lines one can read the better organization for foreign trade developed and fostered abroad, an issue of paramount importance in the economic struggles after the war.

Labor and Labor Organizations

(Abstracts by George E. Barnett)

ABBOTT, E. *The war and women's work in England*. Journ. Pol. Econ., July, 1917. Pp. 38.

The effect of the present war on the employment of women in industry.

BERNDT, I. A. *Labor turnover in 1906, 1916 and after*. Indus. Management, July, 1917. Pp. 7.

Discusses the history and the future of the movement to reduce labor turnover.

CONWAY, T. *Street railway employment in the United States*.⁴ Elec. Ry. Journ., Sept. 29, 1917. Pp. 5.

Abstract of the recent Bureau of Labor report.

DUFFY, F., BERRY, G. L., O'CONNOR, J. M., ETC. *Trade organizations and the war problems*. Am. Federationist, Sept., 1917. Pp. 9.

Brief statements by the officials of a number of national trade unions as to the effect of the war on their organizations.

EMMET, B. *Will profit sharing solve labor difficulties?* Mo. Rev. U. S. Bureau Labor Stat., Aug., 1917. Pp. 7.

The adverse conclusion reached is based on an extensive investigation recently made by the author for the Bureau of Labor Statistics.

KALLEN, H. M. *The war and the labor programme*. Dial, June 28, 1917. Pp. 4.

Urges the explicit recognition of the laborer as a partner in industry through the sharing of control and of profits.

OSBORN, C. F. *Methods of meeting the demands for labor*. Mo. Bull. U. S. Bureau Labor Stat., Sept., 1917. Pp. 11.

Describes the work of the Civil Service Commission, the Federal Employment Bureaus, and the United States Public Service Reserve as agencies in mobilizing the labor power of the country.

SQUIRES, B. M. *The industrial disputes investigation act of Canada*. Mo. Bull. U. S. Bureau Labor Stat., Sept., 1917. Pp. 12.

Chiefly statistical.

WESTON, G. *Industrial democracy with particular reference to the relation between capital and labor*. Journ. West. Soc. Engrs., Mar., 1917.

Eight hours for young workers. Bull. Nat. Assoc. Wool Mfrs., July, 1917. Pp. 6.

Experience of Massachusetts wool manufacturers under the eight-hour law in that state.

How New York employers are meeting the problem of the higher cost of living of employes. Econ. Wld., Sept. 29, 1917. Pp. 5.

A report by the Industrial Bureau of the Merchants' Association of New York.

Labor in war time in Great Britain. Mo. Rev. U. S. Bureau Labor Stat., June, 1917. Pp. 18.

Reviews the measures taken by the British government with reference to labor.

Labor law administration in New York. Am. Labor Legis. Rev., June, 1917. Pp. 518.

Exhaustive and valuable study covering all aspects of the subject. *Labor war problems—British methods.* Am. Federationist, July, 1917. Pp. 9.

Explanations by Mr. J. H. Thomas of the British Commission.

Labour in the textile trades in Germany and certain adjacent neutral countries. Board of Trade Labour Gaz. (London), June, 1917. P. 1.

The growing scarcity of raw material is reflected in the amount of unemployment.

Output in relation to hours of labor. Mo. Rev. U. S. Bureau Labor Stat., June, 1917. Pp. 8.

Two instances of favorable results from decreases in the hours of labor.

Prevailing hours of labor in the United States. Mo. Bull. U. S. Bureau Labor Stat., Sept., 1917. Pp. 15.

A summary chiefly of material contained in the Census of Manufactures and in the Bulletin of the Bureau of Labor Statistics.

The reorganization of industry in Great Britain. Mo. Rev. U. S. Bureau Labor Stat., Aug., 1917. Pp. 10.

A summary of papers presented at a conference called by Ruskin College to consider after-war problems.

Strike and union agitation fail in Denver. Elec. Ry. Journ., July 7, 1917. Pp. 3.

Ascribes failure to the opposition of a mutual association of the employees of the street-railway company.

Women's wages in munition factories in Great Britain. Mo. Rev. U. S. Bureau Labor Stat., Aug., 1917. Pp. 10.

The methods by which the government fixes wages.

Money, Credit, and Banking

(Abstracts by Chester A. Phillips)

AUSTIN, O. P. *War inflation and the world price level after the war.* Econ. Wld., Sept., 1917. Pp. 3.

Predicts that the high price level of the present, due mainly to excessive issues of uncovered paper by the fighting countries, will continue for many years after the war.

BELLOM, M. *Contribution à la notion du change.* Journ. des Econ., Aug., 1917. Pp. 18.

Among the influences affecting the exchanges is confidence arising

from an appreciation of the economic and political conditions and from the moral tone of the country on which bills are drawn.

BELLOM, M. *La circulation fiduciaire et les paiements par chèques ou virements.* L'Econ. Franç., July 21, 1917. Pp. 3.

The use of checks has made little headway.

BLISS, W. G. *The place of bank supervision in the promotion of sound banking.* Journ. Am. Bankers Assoc., Sept., 1917. Pp. 6.

Advocates closer scrutiny on the part of examiners of bank loans and other assets.

BRADY, J. E. *Acceptances and rediscounts under federal reserve act.* Banking Law Journ., Sept., 1917. Pp. 4.

An analysis of section 13 of the federal reserve act as construed by the Federal Reserve Board.

CLAUSEN, J. *Economic advantages of trade and bank acceptances.* Bankers' Mag. (London), Aug., 1917. Pp. 9.

DEL MAR, A. *Making of bank notes, known to the Chinese, most highly developed by Americans.* Journ. Am. Bankers Assoc., July, 1917. Pp. 4.

Historical sketch of the art of making paper money.

HOLDSWORTH, J. T. *Wartime banking problems and need of improved credit machinery.* Trust Companies, July, 1917. Pp. 5.

An arraignment of the open book account.

JONES, B. *Reasons for entering reserve system.* Trust Companies, Aug., 1917. Pp. 4.

A clear account of former deterrents to the entrance of state banks and trust companies into the federal reserve system. Changes in the rulings of the Federal Reserve Board and in the federal reserve act that have made membership attractive.

LEADER, E. R. *The early Sheffield banks.* Journ. Inst. Bankers, June, 1917. Pp. 14.

An intimate, personal account.

LEWIS, G. *Changes in federal reserve act simplify form of weekly statements.* Journ. Am. Bankers Assoc., Aug., 1917. Pp. 3.

The way in which the amendment to the federal reserve act of June 21, 1917, has facilitated the calculation of both note and deposit reserves. The amendment effected a fourfold increase in the potential note expansion of the regional banks.

LYON-CAEN, C. *Les chèques tirés sans provision ou avec une provision insuffisante: une loi nouvelle.* L'Econ. Franç., Aug. 4, 1917. Pp. 3.

Provision has been made (June 22, 1917) for punishing the offender, by imprisonment for from two months to two years and a fine of not less than a fourth of the nominal value of the check and of not more than double that value.

MADDOX, R. F. *The relation between banks and trust companies and American railroads.* Econ. Wld., June 30, 1917. Pp. 3.

Statistics pertaining to the holding of railway and other bonds by

banking institutions during recent years. Urges that the purchase of railroad securities by banks be maintained through an allowed increase in freight rates.

MAY, M. *The probability of very high money rates in the United States in the near future.* Econ. Wld., Aug. 18, 1917. Pp. 2.

Transportation difficulties and high prices, particularly of grain and cotton, the main factors.

MILLER, A. C. *The relation of the federal reserve banks to the success of the first liberty loan.* Econ. Wld., July 14, 1917. Pp. 4.

A logical appeal for war finance without inflation.

NICHOLSON, J. S. *Statistical aspects of inflation.* Journ. Royal Stat. Soc., July, 1917. Pp. 21.

A painstaking study showing an abnormal growth in the various kinds of English currency and a corresponding rise in prices and money wages. In order of time the increase in currency preceded the rise in general prices, the period of incubation being about five months.

STONE, R. *Exercise of trust powers by national banks—effect of United States Supreme Court decision.* Trust Companies, July, 1917. Pp. 3.

Michigan trust companies, legally confined to a purely trust business, opposed the conferring of fiduciary powers on national banks on the ground that corporate administration of trusts might, as a result, be brought into disrepute.

SUPINO, C. *Moneta e prezzi.* Rif. Soc., July, Aug., Sept., 1917. Pp. 52.

A contribution to the discussion of the quantity theory.

TINGLEY, R. H. *Credit expansion based on gold.* Annalist, Aug. 13, 1917. P. 1.

VISSERING, G. *The Netherlands bank and the war.* Econ. Journ., June, 1917. Pp. 28.

- The volume of credit extended by the bank to the business community has been abnormally small; that extended to other banks has been of unprecedented proportions. The position of the Netherlands with respect to the foreign exchanges.

Credit societies in France. Bankers' Mag. (London), Sept., 1917. Pp. 6.

An account chiefly of the operations of the Crédit Foncier.

Directors liable for permitting overdrafts and excessive loans. Banking Law Journ., Aug., 1917. Pp. 10.

Exercise of trust company powers by national banks upheld. Banking Law Journ., June, 1917. Pp. 7.

Decision of supreme court of Michigan reversed by the Supreme Court of the United States.

Restrictions on import of gold and silver. Wealth of India, July, 1917. Pp. 3.

A statement of terms on which the government of India acquires all gold and silver imported.

The progress of banking in Great Britain and Ireland during 1916. Bankers' Mag. (London), Aug., 1917. Pp. 17.

A detailed statement and discussion of the ratio of capital and reserves to liabilities; the proportion continues to diminish.

Public Finance

(Abstracts by Charles P. Huse)

ALLEN, J. E. *War budgets*. Fortnightly Rev., May, 1917.BLAKEY, R. G. *The effects of bonds and taxes in war finance*. S. Atlantic Quart., July, 1917. Pp. 12.

Discusses the economic principles involved in war financing and points out the superiority of the tax to the loan.

BLAKEY, R. G. *The war revenue act of 1917*. Am. Econ. Rev., Dec., 1917. Pp. 25.BOGART, E. L. *Impôts récents sur la richesse aux Etats-Unis*. Rev. Sci. Legis. Finan., June, 1917. Pp. 17.

Describes the federal tax legislation from 1913 to 1916.

BOGART, E. L. *Lessons from our past: the financial management of the Civil War*. Pro. Western Econ. Soc., June, 1917. Pp. 17.BOGART, E. L. *The taxation of wealth*. Bankers Mag., Aug., 1917. Pp. 7.

A review of recent financial legislation in the United States shows a growing disposition to place the burden of taxation upon the wealthy.

CABIATI, A. *Osservazioni su alcune recenti dottrine protezioniste*. Giorn. d. Econ., Aug., 1917. Pp. 23.

Mainly a criticism of Grunzel's volume recently translated into English.

CAUBOUÉ, P. *Gaspillages et économies aux armées*. Journ. des Econ., July, 1917. Pp. 22.

Describes sources of waste in the French army and the measures taken to secure economies.

CHANCELLOR, W. E. *The productive wealth of the United States and how best to employ it in financing the war*. Econ. Wld., Sept. 8, 1917. Pp. 4.

Considers social and political as well as economic factors.

CHESSA, F. *Il nazionalismo economico nel passato e nel presente*. Riv. Ital. di Soc., March-June, 1917. Pp. 32.

A criticism of the principle of the closed commercial state.

CLEVELAND, F. A. *The essentials of a municipal budget*. New Jersey Municipalities, June, 1917.DILLON, H. L. *The tax on undistributed surpluses*. Annalist, July 23, 1917. P. 1.

Believes it will impair the working capital of big corporations.

EDWARDS, A. J. *Some practical aspects of municipal borrowing*. Minnesota Municipalities, June, 1917. Pp. 8.ERMATINGER, J. J. *Municipal borrowing*. Minnesota Municipalities, June, 1917. Pp. 14.FERGUSON, C. E. *School funds and their apportionment in Oregon*. Commonwealth Rev., Apr., 1917. Pp. 30.

An interesting statistical study of school finances in Oregon with some reference to other western states.

GEORGE, R. E. *Recent financial legislation in New Jersey*. Nat. Munic. Rev., Sept., 1917. Pp. 7.

Describes a group of measures passed in 1916 and 1917 for the improvement of municipal finances.

GUYOT, Y. *Le monopole de l'alcool*. Journ. des Econ., July, 1917. Pp. 15.

Traces the course of the movement to make alcohol a government monopoly in France.

GRIZIOTTI, B. *La diversa pressione tributaria del prestito e dell'imposta*. Giorn. d. Econ., May, 1917. Pp. 22.

The ulterior incidence of loans and taxes, comparatively considered, especially the incidence on other generations.

HARRIS, W. W. *How British finance met the shock of war*. Journ. Am. Bankers' Assoc., July, 1917. Pp. 6.

A critical review of such measures as the moratorium, the suspension of Peel's act and the closing of the stock exchange.

JÈZE, G. *Les finances de guerre de l'Angleterre*. Les économies privées. Rev. Sci. Légis. Finan., Apr.-May-June, 1917. Pp. 34.

A critical discussion of the means used in England to secure economies among individuals.

JÈZE, G. *Les finances de guerre de la France*. Rev. Sci. Légis. Finan., Apr.-May-June, 1917. Pp. 62.

Reviews the financial, economic, and political situation in France in 1915 and 1916.

LINDSEY, S. M. *Social aspects of war taxes*. Survey, July 28, 1917. Pp. 2.

Discusses conflicting proposals for financing the war.

McLAREN, K. K. *Effect of war taxes on incomes and profits*. Trust Companies, Sept., 1917. Pp. 6.

A critical discussion of the war tax bill as passed by the Senate.

SELWYN-BROWN, A. *The excess profits tax*. Invest. Wkly., Sept. 15, 1917. Pp. 3.

Estimates the contributions to be expected from certain large corporations.

SENSINI, G. *Lo studio scientifico dei fenomeni finanziari*. Riv. Ital. di Soc., Jan.-Feb., 1917. Pp. 11.

Mainly a review, discriminating and commendatory, of Einaudi's treatise, of which the third edition has already been discussed in the American Economic Review.

SKELTON, O. D. *Canadian war finance*. Am. Econ. Rev., Dec., 1917. Pp. 15.

TRAVIS, E. M. *The cost of highways to the state of New York in the past twenty years*. Econ. Wld., July 28, 1917. P. 1.

A concise account of the development of New York's highway policy.

USSING, A. *Industristaternes toldpolitik: krigens belysning*. Nat. ök. Tids., Mch.-Apr., 1917. Pp. 23.

An analysis of recent free trade tendencies in Germany.

WAGEL, S. R. *The methods of war financing followed by France.* Econ. Wld., June 16, 1917. Pp. 3.

A concise statement of French war finance.

WILLIAMS, W. M. J. *Les finances de la Grande-Bretagne pendant la guerre.* Journ. des Econ., July, 1917. Pp. 19.

Continues the study of British war finance. Complains of wasteful expenditures.

WOLFE, F. E. *Taxation in Ohio.* Am. Econ. Rev., Dec., 1917. Pp. 3.

Agrarian taxes in Bosnia and Herzegovina. Intern. Rev. Agri. Econ., Mar., 1917. Pp. 11.

Traces system from days of 'Turkish rule' to present.

Criticism of the proposed undistributed surplus tax by the American Institute of Accountants. Econ. Wld., July 28, 1917. Pp. 2.

Federal taxation legislation. Journ. Account., Aug., 1917. Pp. 7.

Recommendations of the American Institute of Accountants for the amendment of the Senate finance bill.

L'exploitation du monopole des tabacs. L'Econ. Franç., July 14, 1917. Pp. 3.

Gives financial statistics of the French tobacco monopoly.

Les finances de guerre des Etats-Unis de l'Amérique du Nord. Rev. Sci. Legis. Finan., Apr.-May-June, 1917. Pp. 15.

A brief discussion of the plans of the United States for financing the war.

Projets d'impôts nouveaux. L'Econ. Franç., July 14, 1917. Pp. 3.

Discusses the proposed scheme for substantially increasing French revenues.

Housing

(Abstracts by James Ford)

CHENEY, C. H. *City planning progress in California.* Architect & Engineer of California, July, 1917. Pp. 8.

Zoning in Berkeley, California.

DAMON, G. A. *A "home-made" city of planning exhibit and its results.* Throop College Bull., Oct., 1916. Pp. 10.

"The cause and effect of 'My City' exhibit in Pasadena, California."

FITZGERALD, J. G. and McCULLOUGH, J. W. S. *Sanitation in some Canadian barracks and camps.* Am. Journ. Pub. Health, Aug., 1917. Pp. 9.

GEDDES, P. *The Paris exhibition of the reconstituted city (1916).* Nat. Munic. Rev., July, 1917. Pp. 6.

MAY, C. C. *Indian Hill, an industrial village for the Norton Company, Worcester, Massachusetts.* Nat. Housing Assoc. Pub. No. 40, July, 1917. Pp. 19.

Description, with plans and elevations, of estate of 30 acres. Terms of purchases are stated.

NEWMAN, B. J. *Reconstruction and rehabilitation work in Europe*. Am. City, Sept., 1917. Pp. 4.

SHELTON, A. W. *The shortage of working-class dwellings*. Finan. Rev. Rev., June, 1917. Pp. 9.

Estimates shortage at 450,000 dwellings to be due to finance act of 1910 which "destroyed the confidence of investors in and lenders upon this class of security."

SMITH, H. A. *Multi-family versus individual houses*. Journ. Am. Inst. of Architects, Sept., 1917. Pp. 3.

Illustrating "sawtooth economic open stair" type and "linear type" of apartment houses.

SWAN, H. S. and TUTTLE, C. W. *Planning sunlight cities*. Am. City, Sept., 1917. Pp. 5.

Table of sunshine period at ground level for different building heights and different latitudes.

TALMAKI, R. B. S. S. *State aid for housing*. Local Self-Government Gazette (Madras), Jan., Feb., Mar., Apr., May, June, 1917. Pp. 40.

WASHINGTON, F. B. *A study of negro employees of apartment houses in New York City*. Bull. Nat. League on Urban Conditions Among Negroes, Dec., 1916. Pp. 36.

Wages and conditions of employment, living conditions and suggestions for their improvement.

The city of the sun. Am. City, Aug., 1917. Pp. 4. • •

Illustrations of block unit planned for maximum sunlight by R. Roveda.

Goodyear Heights, second development preliminary information and general description of houses with terms of sale. Akron, Ohio. Pp. 26.

Estate of 350 acres. Map, plans and terms of sale are submitted. Government housing scheme, Well Hall, Eltham, Kent. Journ. Am. Inst. of Architects, Sept., 1917. Pp. 25.

Housing of munition workers near Woolwich by British government.

The need of constitutional amendments for (a) reorganization of the state executive departments (b) creation of a department of municipal government (c) greater degree of home rule for cities and towns (d) regulation and control by cities and towns of the growth and development of their municipal areas. Bull. No. 4, Mass. Fed. of Planning Boards, July, 1917. Pp. 22.

Proceedings of the fourth annual city and town planning conference of Massachusetts planning boards. Bull. No. 6, Mass. Homestead Comm., June, 1917. Pp. 42.

Assessments of betterments, building lines, restrictions on height, use and area of buildings.

Thirteenth report of the board of tenement house supervision of New Jersey, for the year 1916. 1917. Pp. 45.

Insurance and Pensions

(Abstracts by Henry J. Harris)

BIRKMOSE, A. *Ulykkesforsikringsloven of 6/7 1916*. Nat. ök. Tids., Jan.-Feb., 1917. Pp. 26.

Outlines the Danish accident insurance law enacted July 6, 1916.

BOHIN, M. L. *Les retraites ouvrières en Alsace-Lorraine (premier article)*. Réf. Soc., June 16, 1917.

A discussion of workmen's compensation laws in France and Germany with special reference to their possible application in Alsace-Lorraine.

BRINKERHOFF, J. J. *Legislative proposals and enactments affecting life insurance, 1916*. Econ. Wld., July 14, 1917. Pp. 3.

Smaller number of bills introduced into state legislatures in 1917. Most of the bills related to taxation and investment of reserve. General attitude of legislators more favorable.

CHOWEN, W. A. *Why workmen's compensation insurance is found to cost so much*. Econ. Wld., July 28, 1917. Pp. 2.

Causes of the steadily increasing costs, especially in California, with particular reference to the gradual increase of rights, higher industrial activity, industrial diseases, etc.

EMMET, B. *Operation of establishment and trade-union disability funds*. Mo. Rev. U. S. Bureau Labor Stat., Aug., 1917. Pp. 20.

Analyses of operations of 352 funds with 891,000 membership. Shows financing, management, payments, disability rates, and cost of administration.

FISHER, A. *The effects of the war on German life insurance companies*. Econ. Wld., Sept. 1, 1917. Pp. 2.

Heavy investments in war loans, higher death claims and decreased surplus earnings.

FOLGER, H. *Principles and History of fire insurance*. Econ. Wld., June 9, 16, 23, 1917. Pp. 2, 2, 2.

Development of the business and growth of rate-making boards with special reference to the Pacific coast territory.

KASAHARA, E. *The growth of the institution of life insurance in Japan and its outlook for the future*. Econ. Wld., Aug. 4, 1917. Pp. 4.

In 1880 Japan had practically no life insurance in force; in 1914 there were 39 companies operating, with 1,862,433 policies and \$542,541,000 of insurance outstanding.

LINDSAY, F. *The actual and the possible influence of life and accident insurance companies upon the public health*. Econ. Wld., Sept. 8, 1917. Pp. 3.

Medical examination of applicants for life policies, inspection by accident and casualty companies of applicants and conditions under which they live, and the possible utilization of medical examiners and of solicitors are part of this influence.

LYTTING, C. F. *Privatfunktionärernes Pensionsforhold*. Nat. ök. Tids., March-April, 1917. Pp. 29.

Favors an enlightened industrial pension system for social and economic reasons.

McADOO, W. G. *The administration's completed plan for government insurance of members of our military and naval forces.* Econ. Wld., Aug. 18, 1917.

Text of letter by the Secretary of the Treasury, stating purpose and scope of act.

MORRIS, E. B. *Group life insurance and its possible development.* Pro. Casualty, Actuarial & Stat. Soc. Am., Apr. 20, 1917. Pp. 25.

Review of experience of a large company; general conditions of the contract and possibilities for the future. (Article reprinted in *Economic World*, Aug. 11.)

RIEDEL, R. *Automobile insurance rates.* Journ. Pol. Econ., June, 1917. Pp. 19.

Types of automobile insurance, rate-making organizations, rates for liability, property damage and collision, fire, and theft. Proposes modifications in rate-making.

RIETZ, H. L. *Methods of providing for expenses of obtaining new business by life insurance companies.* Am. Econ. Rev., Dec., 1917. Pp. 7.

RUBINOW, I. M. *Medical benefits under workmen's compensation.* Journ. Pol. Econ., June and July, 1917. Pp. 41, 37.

The entire problem of medical aid to victims of industrial accidents is still awaiting solution in this country. An erroneous sense of economy has placed limitations upon the extent of medical aid which is producing injustice to the injured and harm to society without really saving anything to the employer.

RYAN, H. E. *Revision of workmen's compensation rates.* Pro. Casualty, Actuarial & Stat. Soc. Am., Apr. 20, 1917. Pp. 16.

Results of the study of the Conference of 1917 with the coöperation of the Workmen's Compensation Service Bureau. Work comprised increase of existing level of rates, readjustment of basic pure premiums, and revision of manual of rules.

SMITH, M. A. *The state life fund of Wisconsin.* Journ. Pol. Econ., May, 1917.

SWEET, E. F. *System of government insurance for United States soldiers and sailors.* Official Bulletin, July 14, 1917. P. 1.

Proposes that the accident compensation law for federal employees (Sept. 7, 1916) shall be extended to cover injuries received in war service.

WEBB, A. *Fire insurance in its relations to buildings and their architecture.* Econ. Wld., July 14, 1917. Pp. 4.

Distinguished London architect summarizes fire prevention measures in building.

WOODWARD, J. H. *Provision for expenses in workmen's compensation premiums.* Pro. Casualty, Actuarial & Stat. Soc. Am., Apr. 20, 1917. Pp. 9.

Formulae for the distribution of the items of expense.

U. S. BUREAU OF WAR RISK INSURANCE. *Terms and conditions of soldiers' and sailors' insurance explained.* Official Bulletin, Oct. 17, 1917. Pp. 3.

Text of the policy issued with tables of rates and explanation of terms.

Disease as a compensable injury. Mo. Rev. U. S. Bureau Labor Stat., July, 1917. Pp. 13.

Study of the decisions of the various states and of the federal employees' system as to diseases included, circumstances of the cases, etc. As yet, the compensation systems in force lack a comprehensiveness which would give to all workmen injured in the course of their employment by disease, an adequate, simple, and certain relief.

The general conditions of insurance against fire and the development of mutual insurance. Intern. Rev. Agri. Econ., June, 1917. Pp. 13.

History and review of conditions in the United States based on familiar sources.

Recent reports relating to workmen's compensation and accident insurance. Mo. Rev. U. S. Bureau Labor Stat., July, 1917. Pp. 13.

Digest of recent reports of Minnesota, Nebraska, New Jersey, Porto Rico, Washington, and West Virginia.

Social insurance by the United States government. Mo. Rev. U. S. Bureau Labor Stat., Aug., 1917. Pp. 7.

Text of the amendment of June 12, 1917, providing life and accident insurance for officers and seamen on American vessels, together with text of policy used.

Workmen's compensation act, 1916: notice and text. New South Wales Industrial Gazette, June, 1917. Pp. 19.

Act approved December 12, 1916, which includes occupational diseases.

Pauperism and Charities

(Abstracts by George B. Mangold)

BYINGTON, M. F. *Within our own gates.* Survey, July 7, 1917.

A short account of relief operations in the United States among families of alien men who have gone to Europe to aid their native country in the war.

DRYSDALE, R. *The broader aspect of C. O. S. work.* Charity Organ. Rev., Aug., 1917.

Maintains that a charity organization society has the whole field of social welfare as the sphere of its operations.

SCANLAN, M. J. *Child placing in Massachusetts.* Catholic Charities Rev., Sept., 1917.

Claims that the child-placing system must be supplemented by some plan of institutional care for neglected and dependent children.

SCHWEINITZ, K. DE. *The Pittsburgh conference of charities and correction.* Nat. Munic. Rev., Sept., 1917.

Short analysis of the proceedings of the annual conference of charities and corrections, held at Pittsburgh in June, 1917.

VASALY, C. E. *The new child welfare laws of Minnesota and the state board of control.* Social Welfare, Oct., 1917.

Discusses briefly the child welfare legislation recently enacted in Minnesota, notably relating to illegitimacy, county boards of child welfare, regulation of maternity hospitals and child-caring agencies, mothers' pensions, and the Juvenile Court.

Care of Dependents of enlisted men in Canada. Mo. Rev. U. S. Bureau Labor Stat., July, 1917.

Mentions four sources from which dependents of enlisted men receive aid and gives schedule of assistance used by the Canadian Patriotic Fund.

How France returns her soldiers to civilian life. Mo. Rev. U. S. Bureau Labor Stat., Aug., 1917.

Discusses the disabled soldier, medical treatment, reëducation and reëstablishment in civilian life.

When the breadwinner goes to war. Survey, Aug. 18, 1917.

An analysis of the government bill providing for insurance of soldiers, compensation, and allowance to families.

Assemblée générale de l'Office central des oeuvres de bienfaisance. Réf. Soc., July, 1917.

Address by the president of the Société d'Economie Sociale.

NOTES

The Thirtieth Annual Meeting of the American Economic Association will be held in Philadelphia beginning Thursday, at ten a. m., December 27, 1917. The American Political Science Association, American Sociological Society, American Statistical Association, American Association for Labor Legislation, American Historical Association, American Farm Management Association, and the Association of Accounting Instructors, will also meet in Philadelphia during that week.

Among the papers to be read at the meetings of the American Economic Association are: "Federal taxes upon income and excess profits," by T. S. Adams; "Report of the committee on land colonization," by B. H. Hibbard, chairman; "Farm management investigations relative to utilization of land," by W. J. Spillman of the Department of Agriculture; "Present valuation of railroads by the Interstate Commerce Commission," by John Bauer; "Federation of city, state, and federal systems of employment offices," by Henry R. Seager; "Lessons from English labor experience during the war," by M. B. Hammond; "Plan of the Department of Agriculture and its operation" (in the employment of labor), by E. V. Wilcox of the Department of Agriculture; "Social control of the accumulation and distribution of wealth," by E. C. Hayes; "Motives of economic life," by Carleton H. Parker; "New aspects of price and value problems," by Benjamin M. Anderson, Jr.; "Some contributions of the war to our knowledge of money and prices," by Irving Fisher; "Coöperation with the states" (in government activity in war time), by Arthur W. McMahon; and "New problems of governmental efficiency," by Arthur N. Holcombe.

Presidential addresses will be as follows: "Ideals as a factor in future control of international society," by George E. Howard, president of the American Sociological Society; "The nature and future of international law," by Munroe Smith, president of the American Political Science Association; and "Economic reconstruction," by John R. Commons, president of the American Economic Association.

Since August 1, 1917, the following names have been added to the membership of the American Economic Association:

Anderson, G. L., 697 Stowell Ave., Milwaukee, Wis.
Arbuthnot, E. H., Dyer Packing Company, Vincennes, Ind.
Blood, Robert C., 4747 Teiper St., Frankford, Philadelphia, Pa.

- Bowers, John H., Stillwater, Okla.
 Chancellor, William E., 804 Beall Ave., Wooster, Ohio.
 Dolmetsch, R., 780 West End Ave., New York City
 Emmertz, N. A., 1526 S. State St., Chicago, Illinois
 Gasson, R. H., Army Y. M. C. A., Fort Mason, California
 Goldman, Maurice A., Milford Mfg. Co., Milford, N. H.
 Grube, O., 3524 East 14th St., Oakland, California
 Hamblin, G. B., Whitinsville, Mass.
 Hayes, F. B., Toronto Carpet Mfg. Co., Toronto, Canada
 Higgs, Joseph, Box 233, Lafayette, Ind.
 Kane, Peter J., 54 William St., New York City
 Keith, Charles S., Keith and Perry Bldg., Kansas City, Mo.
 Lane, Alfred M., 4121 Forest Park Blvd., St. Louis, Mo.
 Lewis, Roland C., 606 West 5th St., Sterling, Ill.
 Lilly, Lewis, University of Washington, Seattle, Wash.
 Longley, C. J., 405 Widener Bldg., Philadelphia, Pa.
 Mahone, Albert W., 929 Stock Exchange Bldg., Chicago, Ill.
 Mansley, R. H., 54 William St., New York City
 Marx, Sigmund J., 1619 Real Estate Trust Bldg., Philadelphia, Pa.
 Miller, Thomas A., 1410 Baxter St., Toledo, Ohio
 Osborn, George A., Rutgers College Library, New Brunswick, N. J.
 Paton, W. A., 1319 Wells St., Ann Arbor, Michigan
 Paz, Ezequiel, Avenida de Mayo, Buenos Aires, Argentina, S. A.
 Philipp, Reinhard, 3 Sonoma Place, Holyoke, Mass.
 Pian, Charles H., Seymour Road, British Concession, Tientsin, China
 Pittman, Alfred, 2138 California St., Washington, D. C.
 Rice, L. G., 3579 Monteith Ave., Cincinnati, Ohio
 Robertson, James P., 533 Henry Bldg., Seattle, Wash.
 Roden, Ernest A., 614 Mercantile Bldg., Cincinnati, Ohio
 Schopbach, Charles H., Care of International Corset Co., Aurora, Ill.
 Scobie, John C., 54 William St., New York City
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ALPHA ZETA PI. Serious demands have been made upon the students of human society during this war, and even more serious de-

mands are going to be made upon them in the period of social reconstruction which must come after the war. Unless students of society are prepared to furnish the social information which the world will need, unless they can show the same standards of scholarship, the same scientific detachment with zeal for the truth and humanity, which the best students of the physical sciences show, not only the world, but the social sciences will suffer. It is time that the social sciences were lifted to a new plane of scholarship and of scientific and academic recognition. For the leadership of this twentieth century world should belong to the social sciences, not to the physical sciences; and this needs to be both said and recognized.

The Alpha Zeta Pi society (taking as its motto Aristotle's dictum, *Anthropos zoön politikon*) was founded at the University of Missouri in 1915 to do this work of lifting the social sciences to a new plane of scholarship and of recognition. Strangely enough the society was initiated by one not directly specializing on the problems of the social life—by Professor Max F. Meyer, professor of experimental psychology at the University of Missouri. He saw that there was need of a society to do for the social sciences what Sigma Xi was doing for the sciences of physical nature—to secure them recognition, to promote their academic interests, and to encourage research and scholarship in them, among both students and faculty. It is not particularly to the credit of academic men in these social sciences that Professor Meyer's idea was not taken up enthusiastically and local branches of the society organized in all leading institutions; for the society exists not to confer another honorific decoration, but for serious work.

It may be said that we already have the American Historical Association, the American Economic Association, the American Political Science Association, the American Sociological Society, and similar bodies. But these are not strictly academic societies, and they cannot perform the work which Alpha Zeta Pi is designed to accomplish, any more than the American Zoölogical Society can perform the work of Sigma Xi.

The undersigned happens to be the president of the local chapter of Alpha Zeta Pi at the University of Missouri for the current academic year. He will be glad to render any assistance he can in organizing chapters in other institutions. No national organization has yet been formed. It is not for the University of Missouri chapter to say what conditions will govern admission to a national organization if such should ever be formed; that the national organization would have to determine. In the meantime I would urge that in all institu-

tions where it is desired to promote high standards of scholarship in the social sciences similar societies be organized; if possible, on broad lines, including all faculty members who have a genuine interest in the scientific study of the social life and all seniors and graduate students who show decided promise of achievement in those lines.

CHARLES A. ELLWOOD.

*University of Missouri,
Columbia, Mo.*

The National Institute of Social Sciences will meet at the Hotel Astor, New York City, January 18, 1918, at 3 p. m., to discuss "Reconstruction After the War: Its Political, Economic, and Social Aspects." The program of the meeting may be obtained from Dr. Erla Rodakiewicz, 225 Fifth Ave., New York City.

Dr. N. I. Stone is engaged in a study of wage conditions in factories manufacturing army clothing, with a view to the standardization of piece rates paid to workers on these garments, under the power conferred upon the recently created Board of Control of Labor Standards in Army Clothing.

Professor Richard T. Ely is undertaking, in connection with his research work for the University of Wisconsin, a comprehensive investigation in the field of the cut-over and unsettled lands of northern Wisconsin. There are some 13,000,000 acres of such land, presenting along with similar areas in Minnesota and Michigan the largest unsettled land area east of the Rocky Mountains.

Professor Fred R. Fairchild has been engaged for a part of the summer by the Pacific Gas and Electric Company in the preparation of its case before the United States District Court in a suit to test the legality of certain rates for gas as fixed by the Board of Supervisors of the City of San Francisco.

Professor J. B. Clark, in the *Yearbook of the Carnegie Endowment for International Peace*, for 1917, reports in regard to the preparation of a collection of data for an economic history of the war. The Division of Economics and History of the Carnegie Endowment has also undertaken to study economic conditions in China, Japan, and our own Pacific States.

Professor L. C. Marshall and Professor Charles H. Judd, of the University of Chicago, are editing the series of *Lessons in Community and National Life*, published by the Bureau of Education and the United States Food Administration for use in the elementary, intermediate, and high schools of the country.

Assistant Professor G. G. Huebner, of the University of Pennsylvania, has written a series of papers on railroad traffic which are appearing bimonthly in *The Traffic World*.

The autumn issue of the *American Labor Legislation Review* furnishes a brief analysis of the labor laws enacted during 1917 by some fifty regular and special state legislative sessions and by Congress. A universal eight-hour law in Alaska, eight-hour laws for women in Montana and Nevada, establishment of the legal minimum wage in Arizona, adoption of workmen's compensation acts in Delaware, Idaho, New Mexico, South Dakota, and Utah, and creation of commissions to study health insurance in California, Connecticut, Illinois, Massachusetts, New Hampshire, Ohio, Pennsylvania, and Wisconsin, are among the outstanding features. Several shortsighted attempts to lower labor protective standards during the war were successfully opposed.

The General Index to volumes 1 to 10 (1906-1916) of the *American Political Science Review* and to the ten volumes of *Proceedings* of the American Political Science Association (1904-1913) may be obtained for one dollar a copy from Professor Chester Lloyd Jones, Madison, Wisconsin. It is a subject and author index, including articles, notes, and book reviews, with cross references, making a pamphlet of about 120 pages of the same size and style as the Review.

In addition to those noted in the lists of New Books are the following publications:

Appleton: *Principles of Ocean Transportation*, by Emory R. Johnson and G. G. Huebner, which is a revised and enlarged edition of *Ocean and Inland Water Transportation*.

Century Company: *An Historical Introduction to Social Economy*, by F. Stuart Chapin.

Doubleday, Page: *The Trust Problem*, by J. W. Jenks, fourth edition enlarged, and completely revised.

Dutton: *The British Shipping Industry*, by Edgar Crammond.

Engineering Magazine Company: *The Application of Efficiency Principles*, by George H. Shepard.

Harvard University Press: *Ancient Customs Duties of England*, by Norman S. B. Gras; *State Tax Commissions*, by Harley L. Lutz; *Trade Navigation between Spain and the Indies in the Time of the Hapsburgs*, by Clarence H. Haring.

Houghton Mifflin: *The Theory and Practice of Scientific Management*, by C. Bertrand Thompson,

Longmans, Green: *Contemporary Theories of Unemployment and of Unemployment Relief*, by Frederick C. Mills; *The Works Manager Today*, by Sidney Webb.

Princeton University Press: *Coöperative Marketing: Its Advantages as Exemplified in the California Fruit Growers Exchange*, by W. W. Cumberland; *Postal Savings*, by Edwin W. Kemmerer.

Ronald Press Company: *Department Store Merchandise Manuals: Notions*, by M. A. Souder; *Jewelry*, by Beulah E. Kennard; *Leather Goods*, by Mary A. Lehmann; *Cotton and Linen*, by Eliza B. Thompson.

T. Werner Laurie, Ltd.: *Women's Work in War Time: A Handbook of Employment*, compiled and edited by Mrs. H. M. Usborne.

Appointments and Resignations

Professor T. S. Adams has obtained a year's leave of absence from Yale University to act as an expert in the Treasury Department at Washington, in the Bureau of War Revenue Statistics.

Professor E. E. Agger, of Columbia University, is executive secretary of the Liberty Loan Committee for Federal Reserve District No. 2.

Mr. W. Scott Boyce has been appointed professor of economics at Connecticut College for Women.

Dr. James E. Boyle, field agent in marketing at the North Dakota Experiment Station, has been given a leave of absence to conduct the field work for the Bureau of Markets in studying the grain trade under the Food Survey Investigation act.

Mr. F. W. Breimeier, of the Wharton School of Finance and Commerce, University of Pennsylvania, is in the service of the Federal Trade Commission for economic investigations.

Professor Ralph Starr Butler, of the New York University School of Commerce, Accounts and Finance, has been given leave of absence for the year 1917-1918 and is now with the United States Rubber Company.

Dr. C. M. Case, formerly professor of sociology at Penn College, Oskaloosa, is now associate professor of sociology at the State University of Iowa.

Mr. S. S. Catell has been appointed assistant professor of accounting at the University of Kansas.

Professor R. E. Chaddock, of Columbia University, in the spring of

1917 acted as expert investigator in the Bureau of Efficiency at Washington.

Dr. Frederic E. Clark, who substituted last year for Professor E. D. Jones at the University of Michigan, has been appointed head of the department of economics at the University of Delaware.

Professor Walter E. Clark, head of the department of political science in the College of the City of New York, has been elected president of the University of Nevada and is to take office January 1.

Mr. Fred C. Croxton, formerly chief statistician of the Industrial Commission of Ohio and now director of the Social Service Department of the Ohio Institute for Public Efficiency, has been made food administrator in Ohio.

Mr. W. W. Cumberland, assistant professor of economics^a at the University of Minnesota, has been granted leave of absence to take part in a scientific investigation of the economic and social conditions of Mexico. Mr. Cumberland has also been named to succeed Professor E. Dana Durand as chief of the division of research in agricultural economics at the University of Minnesota.

Mr. Samuel H. DeVault has been appointed research assistant in agricultural economics at the Massachusetts Agricultural College, and is engaged upon a study of the marketing of tobacco, with especial reference to the Connecticut Valley.

Dr. Edward T. Devine, professor of social economy in Columbia University, after a month spent in studying the work that is being done for crippled soldiers and sailors in England and France, has been appointed chief of the Bureau of Refugees and Home Relief, under the American Red Cross Commission to France. Dr. Devine will have charge of the relief work for the 850,000 refugees outside of Paris.

Professor Carroll W. Doten is on leave of absence from the Massachusetts Institute of Technology and is serving as head of the Information Division in the Industrial Service Department of the Emergency Fleet Corporation of the United States Shipping Board at Washington.

Mr. Paul Howard Douglas is teaching this year at Reed College, Portland, Oregon.

Professor E. Dana Durand has been granted a leave of absence from the University of Minnesota in order to work with the National

Food Administration. In coöperation with Mr. Harry A. Wheeler, State Food Administrator for Illinois, he is carrying on an investigation of the packing industry in its relation to the food situation during the war.

Professor J. B. Ebersole, of the University of Minnesota, has been granted a leave of absence and is serving as cashier of the State Deposit Bank of Minneapolis.

Mr. G. W. Eckelberry has been appointed instructor in economics at the Ohio State University.

Mr. William S. Edsall, assistant in finance at the New York University School of Commerce, Accounts, and Finance, is on leave of absence for the duration of the war. He is chief electrician at the Submarine Base, New London, Connecticut.

Professor Fred R. Fairchild, of Yale University, is on leave of absence for the first half of the current academic year.

Mr. Maxwell Ferguson, recently instructor in economics at Hamilton College and at Vassar College, has been appointed assistant professor of economics at the University of Kansas.

Professor Clytus A. Freeman, of the United States Census Bureau, is acting as associate professor of economics in the University of Nebraska during the absence of Professor Stephens.

Mr. William J. Goggin has been appointed instructor in accounting at the College of Business Administration of Boston University.

Dr. Frank A. Golder, who has been doing research work in Petrograd, has returned to the State College of Washington, at Pullman.

Professor John H. Gray, of the University of Minnesota, will remain on leave for the current year continuing his work with the Interstate Commerce Commission as valuation expert.

Mr. E. S. Gregg has been appointed instructor in economics at the University of Texas.

— Assistant Professor John M. Gries has been appointed acting director of the Bureau of Business Research at Harvard University in the absence of Professor Melvin T. Copeland.

Professor M. B. Hammond, of the Ohio State University, is one of the members of the Social Insurance Commission recently appointed by Governor Cox to investigate and report to the next legislature on the subject of health insurance, sickness insurance, and old age insurance.

Dr. Max S. Handman, of the University of Chicago, has been appointed professor of sociology at the University of Texas.

Dr. J. Anton de Haas has resigned his position as associate professor of business administration at the University of Texas to become professor of economics in the College of Commerce at the Ohio State University, having charge of the courses in accounting and industrial management. During the summer Dr. de Haas was employed as examiner by the Federal Trade Commission and was in charge of the lead and zinc cost investigation.

Professor R. H. Hess, of the University of Wisconsin, is on leave of absence and is a captain in the Quartermaster's Department at Washington and Boston, assisting in the reorganization of the business administration of the department.

Professor Willard E. Hotchkiss has resigned his position as professor of economics and dean of the School of Commerce of Northwestern University to accept the position of professor of economics and director of business education in the University of Minnesota. Professor Hotchkiss is also serving as chairman of the department of economics at Minnesota.

Dr. George M. Janes, recently at the University of Washington, has been appointed assistant professor and acting head of the department of economics at the University of North Dakota.

Mr. Robert J. McFall, instructor in economics at the University of Minnesota, is now serving in the Dominion Bureau of Census and Statistics at Ottawa and is also assisting in the Canadian food control.

Dr. Frank L. McVey has resigned from the presidency of the University of North Dakota and become president of the University of Kentucky.

Professor A. H. Melville is on leave of absence from the University of Wisconsin and is acting as secretary of the Wisconsin State Council of Defense.

Mr. Thomas W. Mitchell has resigned his position as assistant professor of economics at the University of Minnesota to accept a position in the production department of the Acme Wire Company of New Haven, Connecticut.

Mr. D. W. Morton, who has been dean of the School of Commerce at the University of Oregon for the last two years, is now professor of accounting at the College of Business Administration of Boston University.

Mr. Phillip B. Kennedy, on leave of absence from the New York University School of Commerce, Accounts and Finance while commercial attaché to Melbourne, Australia, has been appointed commercial attaché to the Legation at London.

Miss Hazel Kyrk, instructor in economics in Oberlin College, has been granted a year's leave of absence for further study.

Professor H. E. Person is on leave of absence from the Amos Tuck School of Dartmouth College for the duration of the war and is serving on the Storage Committee of the War Industries Board, having charge of the Personnel Department.

Mr. H. H. Preston has been appointed assistant professor of economics at Oberlin College.

Mr. A. S. Prickett has received appointment in the department of economics at the University of Illinois.

Professor George E. Putnam, of the University of Kansas, has been made professor of economics at Washington University, St. Louis.

Professor Frank U. Quillin has resigned his position as head of the department of economics at Knox College to become associate professor of business administration in the College of Commerce and Business of Toledo, Ohio, Municipal University.

Mr. B. Carroll Reece, instructor in finance at the New York University School of Commerce, Accounts and Finance, has leave of absence for the duration of the war and is lieutenant in Company A, in the 166th Infantry.

Mr. W. H. Reeves, of the Wharton School of Finance and Commerce, University of Pennsylvania, is in the service of the Federal Trade Commission for economic investigations.

Mr. E. C. Robbins, of the University of Oregon, has been appointed assistant professor of economics at the University of Minnesota.

Dr. W. A. Robinson has been appointed professor of economics and business management at Olivet College.

Dr. James Harvey Rogers has leave of absence from the University of Missouri and is engaged in statistical work under Dr. Leonard P. Ayres, Director of Organization and Statistics, Council of National Defense.

Professor E. A. Ross, of the University of Wisconsin, is in Russia during the first semester on leave of absence, representing the Amer-

ican Institute of Social Service and investigating the social and economic conditions in the country.

Dr. Frederic A. Russell resigned his position as instructor of economics at the University of Illinois to accept a position as professor of economics at the University of Washington.

Assistant Professor Erwin H. Schell is in charge of the course in business management at the Massachusetts Institute of Technology.

Professor Henry R. Seager, of Columbia University, is serving as secretary of the Labor Control Board of the United States Shipping Board at Washington.

Mr. H. E. Sheppard has been appointed instructor in economics at the Ohio State University.

Dr. Kemper Simpson has been appointed an examiner for the Federal Trade Commission.

Mr. Mark A. Smith has been appointed assistant professor of economics at the University of Kansas.

Professor George A. Stephens has been granted leave of absence from the University of Nebraska to assist in the food investigation as examiner in the Federal Trade Commission.

Mr. Russell A. Stevenson has been promoted to an assistant professorship at the State University of Iowa.

Professor Frank T. Stockton, formerly assistant professor of economics and sociology at the University of Indiana, is now dean of the College of Arts and Sciences and professor of economics at the University of South Dakota.

Dr. Charles J. Stowell has been appointed head of the department of economics at Marionville College, Missouri.

Professor Lorin Stuckey has resigned his position at the State University of Iowa to become president of Sayre College, Lexington, Kentucky.

Mr. John B. Swinney, formerly salesmanager of the Guaranty Securities Corporation in New York and instructor in public secretarial duties at the New York University School of Commerce, Accounts and Finance, has been appointed professor of marketing at Tulane University.

Mr. Donald R. Taft has been appointed instructor in sociology at Ohio State University.

Dr. John G. Thompson has resigned his position as instructor at the University of Illinois and is devoting his time to the completion of a book on *Rural Population*.

Dr. Merle Thompson has been made professor of economics and psychology at Morningside College, Sioux City, Iowa.

Mr. F. M. Thrasher has been appointed instructor in sociology at Ohio State University.

Dr. E. T. Towne, of Carleton College, has been appointed professor of economics and political science and head of the department at the University of North Dakota.

Mr. John C. Traphagen, who has lectured on investments in the New York University School of Commerce, Accounts and Finance, has become treasurer of the Mercantile Trust Company of New York.

Mr. Donald S. Tucker, assistant professor in the department of economics at Wellesley College, is assisting also in the economics department of Tufts College.

Professor T. K. Urdahl, of the University of Wisconsin, is absent during the first semester assisting in the Federal Trade Commission at Washington.

Mr. J. Viner has resigned as instructor at the University of Chicago to accept a position with the Tariff Commission.

Dr. Gordon Watkins has received appointment in the department of economics at the University of Illinois.

Dr. H. B. Whaling, formerly associate professor in the University of North Dakota, is now associate professor of transportation in the School of Commerce at the State University of Iowa.

Mr. Otto F. Wilkinson has been appointed instructor in agricultural economics at the Massachusetts Agricultural College.

Professor F. E. Wolfe, formerly at Colby College, has been elected to the Homer E. White professorship of economics and head of the department of economics and sociology at Ohio Wesleyan University.

Dr. Leo Wolman has been granted leave of absence from Johns Hopkins University for service in the Statistical Division of the Council of National Defense.

Mr. Robert M. Woodbury has resigned his position as assistant professor of economics at the University of Kansas to take a position in the Department of Labor at Washington.

Professor Allyn A. Young, of Cornell University, is Director of the Bureau of Research of the War Trade Board at Washington.

Professor Arthur N. Young, of Princeton University, is serving under the Board of Export Control at Washington.

Eugen von Philippovich, professor of economics at Vienna University, died June 6, 1917.

Professor Gustav Schmoller died June 27, 1917, at the age of seventy-nine. From 1882 to 1913 he was professor at the University of Berlin. An extended notice of his life may be found in the *Economic Journal* for September, 1917, pages 435-438.

The American Economic Review

VOLUME VII

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1917

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CONTENTS

ARTICLES:

	PAGE
Canadian War Finance.....O. D. SKELTON.....	816
Collectivism, War-Time, The Basis of...J. M. CLARK.....	772
Equipment Obligations, Railroad .....ARTHUR S. DEWING.....	353
Federal Reserve System, What the, Has Done .....H. PARKER WILLIS.....	269
Law of Balanced Return, The.....ARTHUR S. DEWING.....	755
Life Insurance Companies, Methods of Providing for Expense of Obtaining New Business by.....H. L. RIETZ	832
Lumber Industry, The Price Problem in..WILSON COMPTON	582
Lumber Prices, Determinants of.....GEORGE A. STEPHENS	289
Marketing Functions and Mercantile Or- ganization .....L. D. H. WELD.....	306
Open Price Associations .....H. R. TOSDAL	331
Postal Savings in the United States, Six Years of .....E. W. KEMMERER	46
Public Service Corporations, Early Reg- ulation of .....M. H. HUNTER.....	569
Reserves Situation in the Federal Reserve System .....RAY B. WESTERFIELD.....	509
Revenue Act of 1917, The War.....ROY G. BLAKEY	791
Single Tax, Theoretical Issues in.....H. J. DAVENPORT	1
Sliding Scale Experiment of 1905-1910, The Fall River .....STANLEY E. HOWARD.....	530
Tax Valuations of Railroads, A Rule for Testing .....MARK A. SMITH.....	31
Trade Dollar, The History of .....PORTER GARNETT	91
Trans-Pacific Shipping, The War and...ABRAHAM BERGLUND	553
Wages, Real, in Recent Years .....F. W. JONES.....	319

REVIEWS OF BOOKS:

ABBOTT and BRECKINRIDGE, Truancy and Non-Attendance in the Chicago Schools. By H. L. Sumner	409
ADAMS, Marketing Perishable Farm Products. By W. R. Camp.....	125
AGHNIDES, Mohammedan Theories of Finance	158
ALBA, Un Programa Económico y Financiero. By J. Klein.....	417
ALLINSON, Dressmaking as a Trade for Women in Massachusetts. By S. S. W. WALDEN.....	851
ALVORD, Mississippi Valley in British Politics. By A. C. Ford.....	382
ARONOVICI, The Social Survey. By E. W. Burgess.....	424
ATHERTON, Survey of Wage-Earning Girls below Sixteen Years of Age in Wilkes-Barre, Pennsylvania, 1915. By S. M. Kingsbury.....	165
BENNETT, Corporation Accounting. By C. H. Scovell.....	637
BOGART and THOMPSON, Readings in Economic History of the United States. By A. C. Ford.....	108
BONGER, Criminality and Economic Conditions. By C. C. Carstens...	162
Boot and Shoe Industry in Massachusetts as a Vocation for Women. By S. S. W. WALDEN.....	147
BOUCHIER, The Nullification Controversy in South Carolina. By J. S. B.	111
BRISCO, Fundamentals of Salesmanship. By R. B. Westerfield.....	139
BUTLER, Marketing Methods. By R. B. Westerfield.....	626
BUTLER, DeBOWER, and JONES, Marketing Methods and Salesmanship. By R. B. Westerfield	626
CLAPP, The Port of Boston. By H. F. Lane.....	117
CLARK, E., Financing Public Schools. By C. J. Bullock.....	656
CLARK, F. E., The Purposes of the Indebtedness of American Cities, 1880-1912. By R. G. Blakey	657

	PAGE
CLARK, V. S., History of Manufactures in the United States, 1607-1860. By T. W. Page.....	390
COMPTON, Organization of the Lumber Industry. By E. C. Robbins..	845
CURTIS, The State Tax System of Washington. By C. C. Plehn.....	418
DUBLIN, Causes of Death by Occupation. By E. R. Hayhurst.....	897
ELLIS, Essays in War Time. By A. B. Wolfe.....	426
ELLWOOD, An Introduction to Social Psychology. By W. H. Heck....	839
ELY, Outlines of Economics. By C. E. Persons.....	98
EMMET, Profit Sharing in the United States. By R. F. Foerster.....	676
FAIRCHILD, Outline of Applied Sociology. By L. L. Bernard.....	600
FAULKNER, Chartism and the Churches. By H. E. Mills.....	605
FERGUSON, State Regulation of Railroads in the South. By L. Rogers..	394
FILLEBROWN, Principles of Natural Taxation. By R. M. Haig.....	894
FILSINGER, Exporting to Latin America. By E. E. Pratt.....	122
FILSINGER, Trading with Latin America. By M. J. Shugrue.....	870
Fire Insurance Lectures. By W. F. Gephart.....	915
FISK, Retail Selling. By R. B. Westerfield.....	139
FLEXNER and BACHMAN, Public Education in Maryland. By C. J. Bullock	656
FOSTER, Banking. By C. A. Phillips	881
FRANKFURTER, Cases under the Interstate Commerce Act. By L. Rogers	396
FREEUND, Standards of American Legislation. By E. Jones..	610
GERSTENBERG, Organization and Control. By F. E. Armstrong.....	648
GEPHART, The Principles of Insurance, Vol. I, Life. By W. M. Strong	670
—, Vol. II, Fire. By W. E. Mallalieu	672
GIBBS, The Minimum Cost of Living. By W. E. Clark.....	665
GILMAN, Principles of Accounting. By C. C. Huntington.....	133
GILLETTE, Constructive Rural Sociology. By T. R. Snavely.....	423
GIRAULT, The Colonial Tariff Policy of France. By F. W. Taussig...	155
GLOVER, United States Life Tables, 1910. By L. I. Dublin.....	168
GOWIN, The Executive and his Control of Men. By H. H. King.....	639
GRUNSKY, Valuation Depreciation and the Rate-Base. By J. Bauer..	634
GRUNZEL, Economic Protectionism. By A. L. Bishop.....	659
HAM, Interest Tables for Small Loans. By H. L. Rietz	654
HAMILTON, Current Economic Problems; Exercises in Current Econ- omic Problems. By A. B. Wolfe.....	103
HARRISON, Community Action through Surveys. By E. W. Burgess...	426
HEDGES, Wage Worth of School Training. By S. M. Kingsbury.....	166
HIBBS, Infant Mortality. By M. L. Mark.....	898
HOBSON, The New Protectionism. By J. B. McPherson.....	885
HOLDSWORTH, Money and Banking. By C. A. Phillips	882
HOURS, Fatigue, and Health in British Munition Factories. By E. R. Hayhurst	880
HOOVER, The Science and Art of Salesmanship. By R. B. Westerfield	139
HUSE, Financial History of Boston, 1822-1909. By H. B. Gardner....	883
HUTCHINSON, The "Socialism" of New Zealand. By J. E. LeRossignol..	176
INGRAM, A History of Political Economy. By C. J. Bullock.....	381
JACKMAN, Transportation in Modern England. By E. R. Dewsnup..	858
JOHNSON and VAN METRE, Principles of Railroad Transportation. By C. W. Doten	855
JOHNSON, E. R. The Panama Canal and Commerce. By W. Ring....	119
JONES, E. D., The Administration of Industrial Enterprises. By C. W. Mixer	630
JONES, J. C., Salesmanship and Sales Management. By R. B. Westerfield	326
JONES, C. L., Caribbean Interests of the United States. By J. F. Fowler	397
JUGLAR, A Brief History of Panics and their Periodical Occurrences in the United States. By W. C. M.	129
KELSEY, The Physical Basis of Society. By L. L. Bernard.....	600

	PAGE
KINGSBURY, The Telephone and Telephone Exchanges. By D. C. Jackson	144
KITSON, Trade Fallacies. By E. W. Goodhue.....	867
KLEIN, Bookkeeping and Accounting. By M. J. Shugrue.....	876
LAPP and MOTE, Learning to Earn. By F. A. Fetter.....	902
LAUCK and SYDENSTRICKER, Conditions of Labor in American Industries By J. A. Fitch	649
LAVERGNE, L'Union Commerciale des Alliés après la Guerre. By S. Litman	895
Lectures and Addresses on the Negro in the South. By E. S. Todd..	423
LUTZ, Wage Earning and Education. By L. Eaves.....	903
LYON, Corporation Finance. By H. R. Tosdal.....	405
MACPHER, Community: A Sociological Study. By C. A. Ellwood.....	598
MACLEAN, Women Workers and Society. By L. Eaves.....	904
MCVEY, Economics of Business. By H. E. Mills.....	603
MADSEN, The State as Manufacturer and Trader. By S. Litman.....	434
Marketing and Farm Credits. By J. E. Boyle	620
MAVOR, Government Telephones. By H. B. Vanderblue.....	406
Meat Situation in the United States By A. E. Cance.....	617
MILLER, A Financial History of Texas. By C. C. Plehn.....	419
MILLS, Democracy and Despotism. By G. B. L. Arner.....	435
MINER, Slavery of Prostitution. By H. E. Mills.....	905
MITCHELL, Accounting Principles. By J. Bauer.....	871
MONTGOMERY, Auditing Theory and Practice. By W. M. Cole.....	130
MUKERJEE, The Foundation of Indian Economics. By C. Day.....	613
NAUMANN, Central Europe. By C. Day.....	113
NOLEN, More Houses for Bridgeport. By J. F.	427
NOURSE, Agricultural Economics. By P. W. Bidwell.....	387
NYSTROM, Retail Store Management. By R. B. Westerfield.....	641
O'CONNOR, Reports re Cost of Living. By F. H. Streightoff.....	870
Ogg, Economic Development and Modern Europe. By C. Day.....	608
PARKHURST, Predetermination of Prices. By J. R. Wildman.....	132
PATTERSON, Notes on Foreign Exchange. By E. W. Kemmerer.....	413
PEABODY, Railway Organization and Management. By C. W. Doten..	121
PECK, Cost of Living on Minnesota Farms. By W. O. Hedrick.....	619
PERRY, Millinery as a Trade for Women. By S. S. W. Walden.....	147
PRATO, Sulle Premesse Economiche del Contratto Collettivo di Lavoro. By R. F. F.	411
PRATT, editor, Course in Foreign Trade. By M. T. Copeland.....	862
PRITCHETT, A Comprehensive Plan of Insurance and Annuities for Col- lege Teachers. By E. B. Wilson.....	910
The Public Schools of Springfield, Illinois. By C. J. Bullock.....	656
QUESADA, La Legislacion Inmobiliaria Tunecina. By D. Kinley.....	109
———, La Nuevo Panamericanismo y el Congreso Científico de Wash- ington. By D. Kinley	113
REED, The Morals of Monopoly and Competition. By E. Jones.....	643
Report of the Pension Funds of the City of New York. By E. B. Wilson	916
Report of State Market Director of California. By A. E. Cance.....	863
RICHMOND, Social Diagnosis. By W. H. Heck.....	899
RHODES, Workmen's Compensation. By L. D. Clark.....	908
ROSENBLATT, Chartist Movement in its Social and Economic Aspects. By H. E. Mills	605
RUBINOW, Standards of Health Insurance. By R. F. Foerster.....	171
RYAN, Distributive Justice. By J. E. LeRossignol.....	377
SCHFEITEL, The Taxation of Land Value. By A. N. Young.....	415
SCHERER, Cotton as a World Power. By E. L. Bogart.....	384
SCOVELL, Cost Accounting and Burden Application. By M. M. FitzHugh	137
SEITZ, Schweiz. Anleihepolitik in Bund, Kantonen und Gemeinden. By C. J. Bullock.....	662

	PAGE
SELIGMAN, Principles of Economics. By H. E. M.	604
SHEPHERD, Essentials of Community Efficiency. By E. W. Burgess....	428
SIMKHOVITCH, The City Worker's World. By F. H. Straightoff.....	906
SLOSSON, The Decline and the Chartist Movement. By H. E. Mills.....	605
SNOWDEN, Socialism and Syndicalism. By G. B. L. A.	435
STETSON and others, Some Legal Phases of Corporate Financing, Re- organization and Regulation. By A. S. Dewing	645
STEWART, Land Tenure in the United States. By R. T. Ely.....	614
SWINNEY, Merchandising. By R. B. Westerfield.....	865
TREVER, A History of Greek Economic Thought. By J. Bonar.....	107
TRYON, Household Manufactures in the United States, 1640-1860. By H. A. Wooster	848
VANDEBLUE, Railroad Valuation. By A. M. Sakolski.....	632
VERHOEF, Kentucky River Navigation. By I. Lippincott.....	853
Vocational Education Survey of Minneapolis, Minnesota. By M. Bloom- field	666
VOGT, Introduction to Rural Sociology. By A. E. Cance.....	843
WAHLSTAD, Credit and the Credit Man. By R. B. Westerfield.....	874
WALLING and others. The Socialism of Today. By L. Ardroni.....	432
WASHBURN, Theodore Roosevelt. By J. S. Bassett	114
WILLIAMS, A Social Study of the Russian German. By R. F. Foerster ..	421
WILLOUGHBY and LINDSAY, System of Financial Administration of Great Britain. By C. C. Plehn	888
WILSON, Workmen's Compensation and Employers' Liability Acts. By W. C. Fisher	430
WINSLOW, Collective Agreements in the Men's Clothing Industry. By N. R. Whitney.....	150
WOLFE, Readings in Social Problems. By H. P. Fairchild.....	164
WYMOND, Government Partnership in Railroads. By E. R. Dewsnup..	856

TITLES OF NEW BOOKS:

Accounting, Investments, and the Exchanges.....	141, 401, 639, 875
Agriculture, Mining, Forestry, and Fisheries.....	115, 389, 623, 847
Capital and Capitalistic Organizations	147, 408, 647, 878
Economic History and Geography	111, 385, 612, 840
General Works, Theory and Its History.....	106, 381, 603, 839
Insurance and Pensions	174, 430, 674, 914
Labor and Labor Organizations	152, 411, 652, 879
Manufacturing Industries	117, 394, 624, 853
Money, Prices, Credit, and Banking.....	153, 412, 654, 882
Pauperism and Charities	176, 432, 676, 917
Population and Migration	161, 421, 664, 898
Public Finance, Taxation, and Tariff.....	158, 418, 661, 894
Socialism and Coöperative Enterprises	176, 435, 677, 917
Social Problems and Reforms.....	165, 424, 668, 901
Statistics and Its Methods	178, 436, 678, 918
Trade, Commerce, and Commercial Crisis.....	129, 400, 629, 869
Transportation and Communication.....	121, 396, 624, 861

DOCUMENTS, REPORTS, AND LEGISLATION:

Arbitration Awards under the Erdman and Newlands Acts. By David A. McCabe	195
Capitalization of Public Utility Consolidations. By Ralph E. Heilman	187
Coal, Report on Anthracite and Bituminous. By Eliot Jones.....	919
Commercial Paper, Educational Campaign Concerning. By Eugene E. Agger	200
Coöperative Marketing Organization among Farmers. By A. E. Cance	926
Corporations	181, 438, 682, 932
Demography	216, 711
Edison Case Decided, The Brooklyn. By John Bauer.....	438
Equation of Exchange for 1916. By Irving Fisher.....	934

	PAGE
Export Trade, American, The Federal Trade Commission's Report on Coöperation in. By W. P. Goemann	923
Federal Documents and the Revision of the Printing Laws. By Henry J. Harris	216
Gasoline, Report on the Price of, in 1915. By Eliot Jones.....	682
Industries and Commerce.....	179, 437, 679, 919
Insurance and Pensions	214, 450, 712, 944
Labor	195, 443, 697, 933
Labor Laws in the Pacific States. By Ira B. Cross.....	701
Lumber Industry, Some Public and Economic Aspect of. By Edwin Clyde Robbins	679
Minimum Wage Cases, The Oregon. By F. S. Deibler.....	697
Money, Prices, Credit, and Banking.....	200, 444, 703, 934
Public Finance	204, 445, 706, 939
Railways and Transportation in Canada, Report of the Royal Commis- sion to Inquire into. By W. W. Swanson.....	687
Social Insurance, Proceedings of the 1916 Conference on. By Henry J. Harris	944
States, Financial Statistics of: 1915. By Roy G. Blakey.....	204
States, Financial Statistics of: 1916. By Roy G. Blakey.....	939
State Governments, The Comparative Cost of. By Roy G. Blakey..	205
Taxation in Ohio. By F. E. Wolfe.....	940
Taxation Study, Pittsburgh Committee on. By William A. Rawles..	445
Tax System of Connecticut, The. By Fred Rogers Fairchild.....	706
Trade and Tariffs in Brazil, Uruguay, Argentina, Chile, Bolivia, and Peru, Report on. By Avar L. Bishop	179
Taxation, Report of the Indiana Special Commission on. By Frank T. Stockton	210
Valuation, Federal, Progress of. By A. M. Sakolski	181
Water Supply, The Report on the Citizens, of Newton. By Ralph E. Heilman	692
Workmen's Compensation in New Jersey. By Walter M. Adriance....	712
 PERIODICAL ABSTRACTS:	
Accounting. By Martin J. Shugrue.....	242, 461, 727, 956
Agricultural Economics. By John Lee Coulter.....	719
Commerce. By M. T. Copeland and H. R. Tosdal.....	232, 456, 722, 951
Corporations and Trusts. By Arthur S. Dewing.....	465, 959
Economic History, Foreign. By Clive Day	231, 455, 718, 949
Economic History, United States. By E. L. Bogart.....	228, 453, 716, 948
Housing. By James Ford	255, 473, 739, 966
Insurance and Pensions. By Henry J. Harris.....	256, 474, 740, 968
Investments. By Arthur S. Dewing	245, 463, 729, 958
Labor and Labor Organizations. By George E. Barnett.....	247, 465, 731, 960
Money, Credit, and Banking. By Chester A. Phillips.....	249, 467, 732, 961
Pauperism and Charities. By Frank D. Watson and George B. Mangold	260, 430, 742, 970
Population and Migration. By William B. Bailey	472
Public Finance. By Charles P. Huse	252, 470, 735, 964
Public Utilities. By Ralph E. Heilman	235, 457, 724, 952
Railways and Transportation. By Julius H. Parmelee.....	237, 458, 725, 954
Statistics. By A. A. Young.....	481
Theory. By W. M. Adriance and A. N. Young.....	227, 451, 716, 947
 FOURTEENTH LIST OF DOCTORAL DISSERTATIONS IN PO- LITICAL ECONOMY	
	485
 NOTES	
	261, 500, 743, 972

CONTRIBUTORS

Leading articles are marked (a); document notes (d); periodical abstracts (p); and all others are reviews.

- Adrianse, W. M., 227 (p), 451 (p), 716 (p).
 Agger, E. E., 200 (d).
 Ardzooni, L., 432.
 Armstrong, F. E., 648.
 Arner, G. B. L., 435.
 Bailey, W. B., 472 (p).
 Barnett, G. E., 247 (p), 465 (p), 731 (p), 960 (p).
 Bassett, J. S., 111, 114.
 Bauer, J., 438 (d), 634, 871.
 Berglund, A., 553 (a).
 Bernard, L. L., 600.
 Bidwell, P. W., 387.
 Bishop, A. L., 179 (d), 659.
 Blakey, R. G., 204 (d), 205 (d), 657, 791 (a), 939 (d).
 Bloomfield, M., 666.
 Bogart, E. L., 228 (p), 384, 453 (p), 716 (p), 948 (p).
 Bonar, J., 107.
 Boyle, J. E., 620.
 Bullock, C. J., 381, 656, 662.
 Burgess, E. W., 424, 426, 428.
 Camp, W. R., 125.
 Cance, A. E., 617, 843, 863, 926 (d).
 Carstens, C. C., 162.
 Clark, J. M., 772 (a).
 Clark, L. D., 908.
 Clark, W. E., 665.
 Cole, W. M., 130.
 Compton, W., 582 (a).
 Copeland, M. T., 232 (p), 862.
 Coulter, J. M., 719 (p).
 Cross, I. B., 701 (d).
 Davenport, H. J., 1 (a).
 Day, C., 113, 231 (p), 455 (p), 608, 613, 718 (p), 949 (p).
 Deibler, F. S., 697 (d).
 Dewing, A. S., 245 (p), 353 (a), 463 (p), 465 (p), 645, 729 (p), 755 (a), 958 (p), 959 (p).
 Dewsnup, E. R., 856, 858.
 Doten, C. W., 121, 855.
 Dublin, L. I., 168.
 Eaves, L., 903, 904.
 Ellwood, C. A., 598.
 Ely, R. T., 614.
 Fairchild, F. R., 706 (d).
 Fairchild, H. P., 164.
 Fetter, F. A., 902.
 Fisher, I., 934 (d).
 Fisher, W. C., 430.
 Fitch, J. A., 649.
 FitzHugh, M. M., 137.
 Foerster, R. F., 171, 411, 421, 876.
 Ford, A. C., 108, 382.
 Ford, J., 255 (p), 427, 473 (p), 739 (p), 964 (p).
 Fowler, J. F., 397.
 Gardner, H. B., 883.
 Garnett, P., 91 (a).
 Gephart, W. F., 915.
 Goemann, W. P., 923 (d).
 Goodhue, E. W., 867.
 Haig, R. M., 894.
 Harris, H. J., 216 (d), 256 (p), 457 (p), 692 (d), 724 (p), 952 (p).
 Hayhurst, E. R., 880, 897.
 Heck, W. H., 839, 899.
 Hedrick, W. O., 619.
 Heilman, R. E., 187 (d), 235 (p), 457 (p), 692 (d), 724 (p), 952 (p).
 Howard, S. E., 529 (a).
 Hunter, M. H., 569 (a).
 Huntington, C. C., 123.
 Huse, C. P., 252 (p), 470 (p), 735 (p), 964 (p).
 Jackson, D. C., 144.
 Jones, E., 610, 643, 682 (d), 919 (d).
 Jones, F. W., 319 (a).
 Kemmerer, E. W., 46 (a), 413.
 King, H. H., 639.
 Kingsbury, S. M., 165, 166.
 Kinley, D., 109, 113.
 Klein, J., 417.
 Lane, H. F., 117.
 LeRossignol, J. E., 176, 377.
 Lippincott, I., 853.
 Litman, S., 434, 895.
 McCabe, D. A., 195 (d).
 McPherson, J. B., 885.
 Mallalieu, W. E., 672.
 Mangold, G. B., 970 (p).
 Mark, M. L., 898.
 Mills, H. E., 603, 604, 605, 905.
 Mitchell, W. C., 129.
 Mixer, C. W., 630.
 Page, T. W., 390.
 Parmelee, J. H., 237 (p), 458 (p), 725 (p), 954 (p).
 Persons, C. E., 98.
 Phillips, C. A., 249 (p), 467 (p), 732 (p), 881, 882, 961 (p).
 Plehn, C. C., 418, 419, 888.
 Pratt, E. E., 122.
 Rawles, W. A., 445 (d).
 Rietz, H. L., 654, 832 (a).
 Ring, W., 119.
 Robbins, E. C., 679 (a), 845.
 Rogers, L., 394, 396.
 Sakolski, A. M., 181 (d), 632.
 Scovell, C. H., 637.
 Shugrue, M. J., 242 (p), 461 (p), 727 (p), 870, 876, 956 (p).
 Skelton, O. D., 816 (a).

Smith, M. A., 31 (a).
 Snavely, T. R., 423.
 Stephens, G. A., 289 (a).
 Stockton, F. T., 210 (d).
 Streightoff, F. H., 870, 906.
 Strong, W. M., 670.
 Sumner, H. L., 409.
 Swanson, W. W., 687 (d).
 Taussig, F. W., 155.
 Todd, E. S., 422.
 Tosdal, H. R., 331 (a), 405, 722 (p),
 951 (p).
 Vandenberg, H. B., 406.
 Walden, S. S. W., 147, 851.
 Watson, F. G., 260 (p), 480 (p),
 742 (p).
 Weld, L. D. H., 306 (a).
 Westerfield, R. B., 139, 509 (a), 626,
 641, 865, 874.
 Whitney, N. R., 150.
 Wildman, J. R., 132.
 Willis, H. P., 269 (a).
 Wilson, E. B., 910, 916.
 Wolfe, A. B., 103, 426.
 Wolfe, F. E., 940 (d).
 Wooster, H. A., 848.
 Young, A. A., 481 (p).
 Young, A. N., 227 (p), 415, 451 (p),
 947 (p).

